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& IBrowse
www software p24

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AMIGA SHOPPER

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Full details on page 8

Inside this issue

- **Getting the most out of DTP:** We've all got a word publisher, but how do we get the best results? This feature shows you what you need and how to use it.
- **Storm C:** A brand new programming language is an important release for the Amiga. Storm C has the power but can it find a niche in today's stretched market?
- **Termite TCP & IBrowse:** A commercial WWW solution is released. We find out if it was worth the wait.
- **Font Machine 2:** Create stunning, texture laden fonts with only a few mouse clicks and a little imagination.
- **Modem Pack:** A new all-in-one modem pack complete with all the software you could need.
- **DataChrome Gold:** Does this datatype integration package offer enough to tempt new users?
- **CD-ROMs:** All the new releases come under our scrutiny, including the new printer enhancer.
- **Tutorials:** CanDo, HiSoft BASIC, AMOS and a special X-DVE 2.5 tutorial.

Storm C

The brand new C compiler that has
taken reviewers by storm! Read our
comprehensive review on page 20.

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AMIGA SHOPPER

The essential magazine for Amiga enthusiasts

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Inside issue

The Amiga sees the release of one of the most promising languages for years, but is it too much too late?

This month *Storm C*, which is being pretty universally admired by Amiga programmers, is released. However, its pricing at over £250 has left us stunned. While other buoyant

platforms have similar languages at even higher prices, the sad truth is that the Amiga market cannot support products at this price. That isn't saying it isn't worth the money, but few Amiga users have the confidence in the phoenix

resurrection we all hope for, to go out and spend over £200 on new software.

This does lead to the question of what hope there is for a serious Amiga market. The user base of Amiga owners is still extremely large and most are not

willing to give up a platform that serves them well. Why, unless you are forced to for work reasons, would you want to abandon one of the most approachable computers ever manufactured? To change to a PC is liable to set an average Amiga owner back around £2000 to be able to get comparable kit and most are reluctant to break the bank for a computer. However, this doesn't mean that they

NEW LOWER

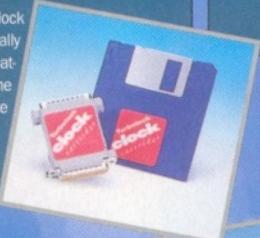
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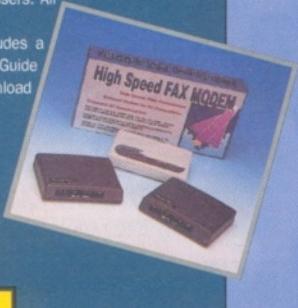
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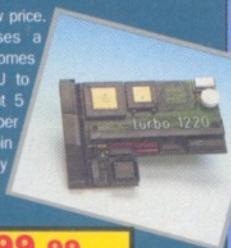
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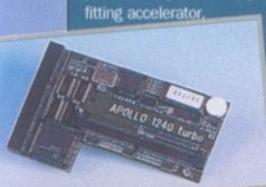
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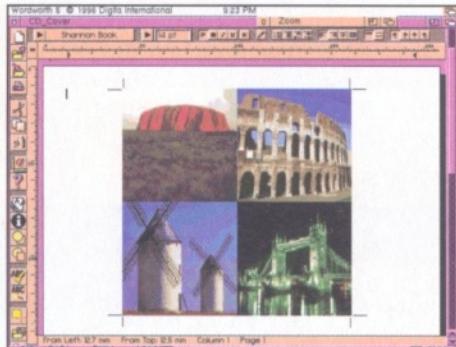
Say it with words 15

OK, so most of us have our word processor or DTP package. Maybe it's Wordworth or Final Writer or a similar program, and you're quite happy with the pages you churn out. But there is always room for improvement.

In our extensive feature **Larry Hickmott** shows you the basics of page design and explains how you should make use of colour and pictures.

Simply throwing as many effects at the page as possible is not always the best use of your time or your Amiga. Subtlety can sometimes be the key to creating an eye-catching page.

Our DTP expert guides you step-by-step through page creation and explains what you should use for best results. Find out how to make your words really count.



Say it with Words: produce your own DTP documents with the help of our extensive feature.

Font Machine 26

Have ClassX done it again? **David Taylor** reviews their new textured font creator. Straight from Italy it is capable of mapping textures and images onto your fonts.

Modem Pack 27

OnLine release a new modem and software pack designed as a complete Internet and mail solution. **David Taylor** finds out if this is the perfect solution for Amiga owners.

DataChrome Gold 28

A new version of the OS improving datatype program. There are a host of new features, but **David Taylor** discovers that there may still be considerable room for improvement.

CD-ROMs 30

Another glut of CD-ROM releases for review in the Amiga Shopper office this month. **Ben Vost** uncovers all the gold and then consigns all the rubbish to the bin.

ShopperReviews

Storm C 20

A brand new C compiler hits the market and we're more than a little impressed.

Paul Overaa examines the program in depth and questions its marketability.

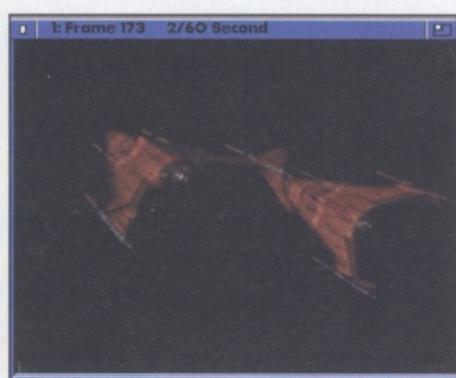
Termite TCP & IBrowse 23

WWW browsing is still all the rage and the Amiga now has a commercial alternative.

Graeme Sandiford gets straight down to it and looks at all the features it has to offer. Are HiSoft onto a winner? Find out.



Termite TCP & IBrowse: The Internet is the future so get kitted out the best software.



CD-ROMs: Ben Vost looks at the latest CD-ROMs including the new collection from Aminet.

ShopperTutorials

AMOS 41

Steve Bye and **Malcolm Lavery** conclude the AMOS tutorial.

X-DVE 2.5 42

Want to know how to create animations within an animation? **David Taylor** shows you how.

CanDo Tutorial 44

John Kennedy continues to show you how to program in the excellent CanDo.

HiSoft BASIC 46

Paul Overaa gives out more hints on using this popular programming language.

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Coverdisk 8

A new game creation system for everyone to use. A complete overhaul for your AmigaDOS as well as a screen promotion utility and more!

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Your questions answered.

Public Domain 37

The latest releases from the PD world. We've scoured the globe and done midnight raids on PD houses to bring you the best new offerings.

Letters 48

Yet more views from your good selves. Find out how to get a 17" monitor for your Amiga.

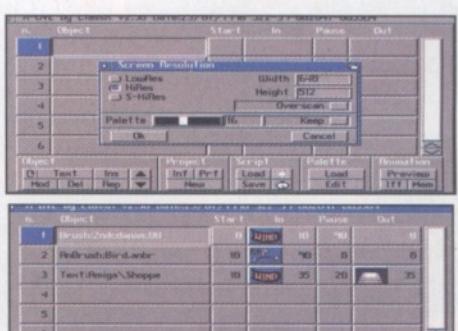
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X-DVE Tutorial: If you've got the program you'll want to know how to get the most out of it.

Say it with words!

You've got the software but are you making the best use of it? Larry Hickmott teaches you the intricacies of professional page design so that you too can create pages that catch the eye and look the business.

Page 15

ShopperDisk

Get creative with this month's disk.

ApplicationZone 8

DOOPSI is a new game creation program that allows anyone to create adventure games. No programming knowledge is required. There's also AMIS, a new ANSI colour text editor.

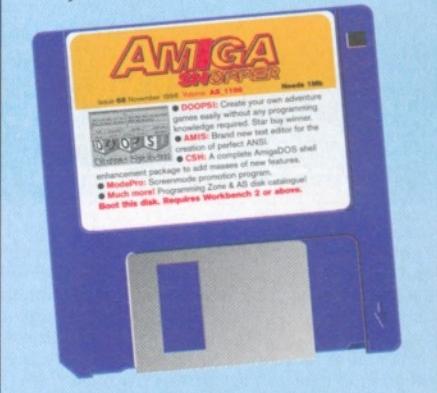
UtilityZone 9

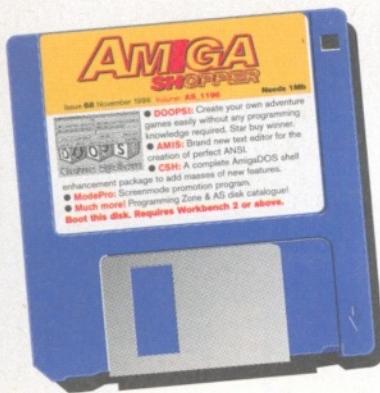
Mode Pro helps you to change the screen options for your programs.

TechnicalZone 9

CSH transforms your Amiga's Shell with massive enhancements

There is also all the code for the AMOS and HiSOFT BASIC tutorial and a guide to every AS Coverdisk.





Cover disk

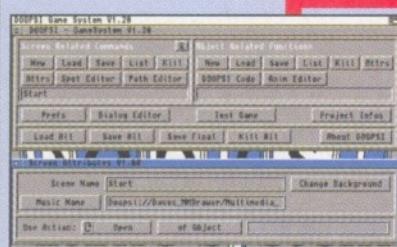
David Taylor brings you yet another Coverdisk which is packed with the latest and best programs from around the globe.

Having had a personal resurgence of interest in programming recently, I was genuinely interested in seeing the new version of DOOPSI. When the opportunity arose to include a working version on the Coverdisk, we just couldn't say no. So, for those who just can't be bothered to learn to code, you can now

create your own games by just pointing and clicking. And if "proper" programming is your bag, then the code for the final part of AMOS and for the HiSoft BASIC tutorial are also on the disk. If this all sounds tedious, then relax in the knowledge that we've also got a new text editor, a screen utility, a whole new AmigaDOS shell and a complete guide to the AS Coverdisks.

DOOPSI Interface

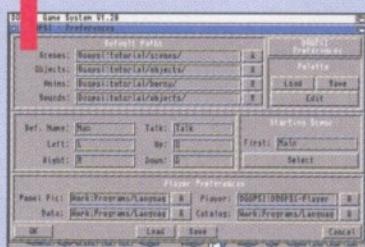
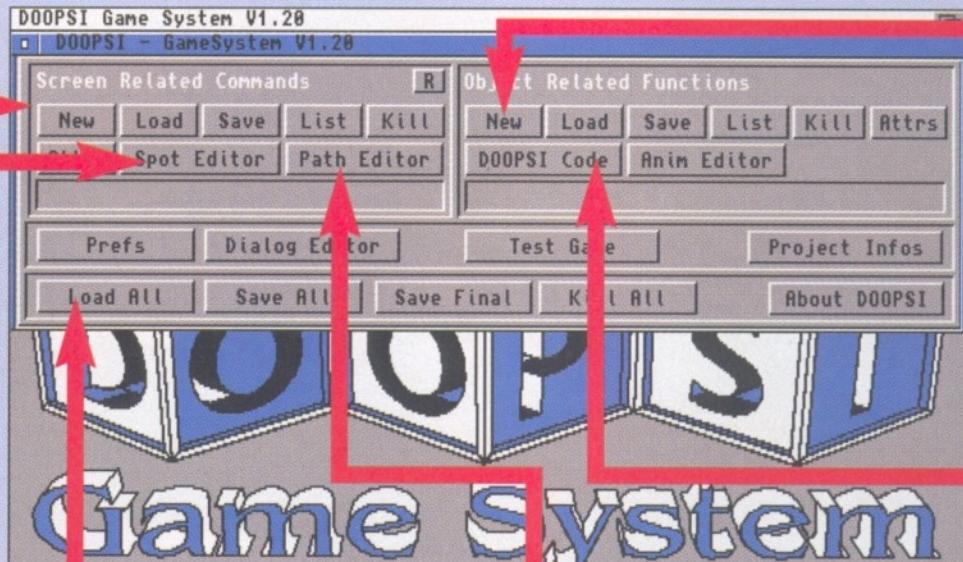
When you click on certain buttons within DOOPSI you will move to a separate control window. This is a quick guide to the various windows. Note that the bottom line of the interface allows you to load and save complete projects which incorporate all the elements and the game's script.



Click on the New button to create a new screen in the game. You will need a background IFF picture for use as the backdrop. When you click on this button you will get a requestor to select the IFF. Underneath is the Screen Attributes window which allows you to select the music module for use with the screen.



When the screen is loaded, you need to select the hotspots that appear on the screen for character interaction. Click on the Spot Editor and its window will appear. Click on Add Spot and you can now click on the picture where you want to add a spot. If you can't see the picture, it is because the Editor window is covering it. Grab the title bar of the interface and move it down the screen to uncover the picture.

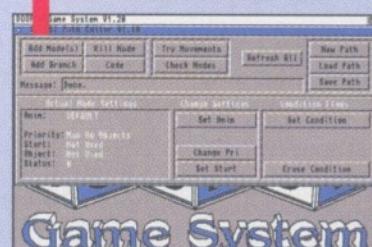


Set the path for the name of the character and the name of the frames that refer to the movements. Check the path for the various different sections: backgrounds, animations, sounds and objects. You also need an IFF background and the data for the interface.

ApplicationZone

DOOPSI

Author: Fabio Rotondo and Andrea Galimberti
Object orientated programming is a very big thing on the PC. It's a method where all the strain is taken out of programming by allowing

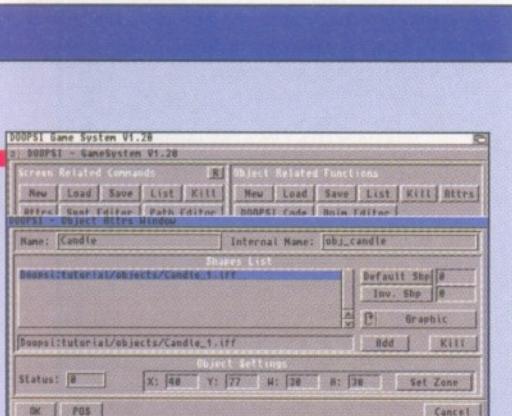


The Path editor allows you to set the path along which your character will move. Inserting a set of nodes at key points on the screen and then add branches to join one node to another - this allows you to set up complex paths where the character can move. You're not simply restricted to a single path through a screen.

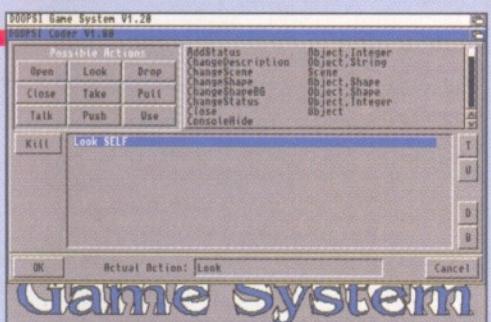
the program to generate most of the code automatically. After all why spend an enormous amount of time learning how to code a mouse click event when you can just have it done for you. It works by allowing you to draw the interface for the program and then select certain points. You can then define what happens if the user does a certain action, say a mouse click, over that point. DOOPSI is very similar to this system and is designed specifically for adventure game creation.

With only a little work you can create a point and click adventure game. In essence what you do is draw some graphics and create some music in your normal software and then import them into DOOPSI. They are given internal descriptions and objects are placed around the room with commands laid on them, such as what should happen if the user looks at, picks up or uses an object.

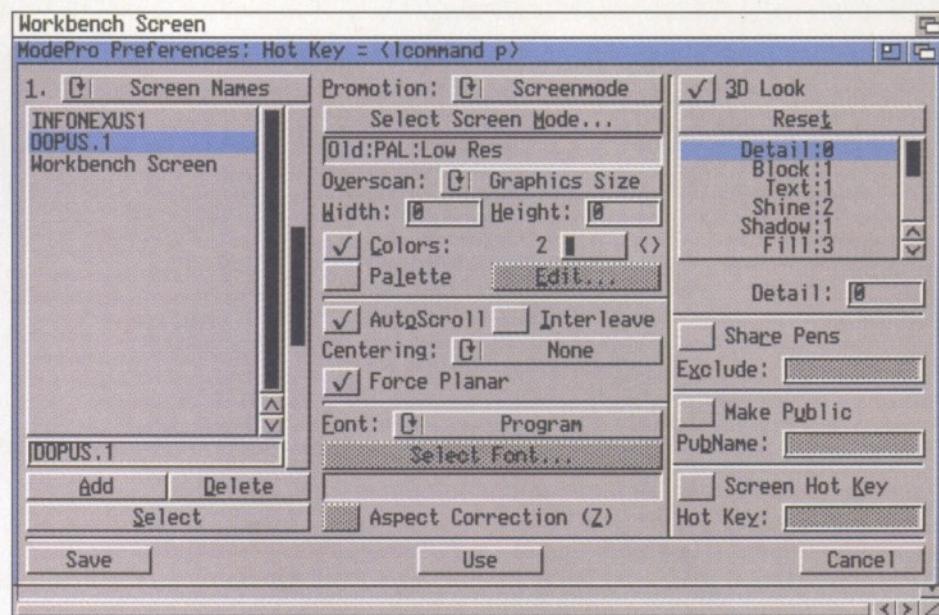
To do this you need a player screen, which contains the look of the main interface and graphics for the background, the character and the objects to go on the background. You place the objects on the background and assign hotspots under them so that the program knows that an action takes place there and then you just assign a walking path around which the



4 - Select an object to be placed on the screen. It needs a name and an internal name which will be used to reference it within DOOPSI. The object needs positioning on the screen and this is done by selecting Set Zone and moving the object to the desired position - you will see a wire box for the object over the screen. If the screen is not visible, drag down the interface window.



6 - This is the actual area where the game actions are defined. You need to select what action is performed on the chosen object, such as Look and the response this will generate, such as Text saying "This is just a candle".



You can now change screen preferences for all your programs including their interface styles.

character will move on that screen.

DOOPSI will take care of everything else. Included in the package are several sample rooms and objects as well as a complete character animation. To install the program, you need to first unpack the disk. This will create an installation disk. Boot Workbench insert this disk and you can then use the Commodore installer to install the program and the tutorials. This program is really best run from hard drive, but you can install it to separate floppy disks.

If you do this note that the preferences which point the program to the path for the game files will need updating. If you are installing to hard drive note that the tutorial directory needs to be inside the DOOPSI directory for the default path to be found. If it isn't either move it in there or correct the preferences. The program has a complete guide file which describes the interface and gives a tutorial on each part. You can also load in the game and look at the way it has been constructed.

AMIS

Author: Willem Mestrom

AMIS is a new text editor designed to allow you to create good ANSI text with different colours and text styles. It is very easy to use and offers a whole range of features. You can easily change the font and type style and adjust the background or foreground colour of text in order to create your text.

In addition to its ANSI capabilities the program has functions for programmers, all the normal features for text editing and numerous program preferences. With AReX capabilities, you can also record and use macros.

to choose the screen resolution that you want to force an application to open on and allows you to set various parameters. You can set the preferences in a variety of ways, promoting according to Program names, screen names or screen modes. Using the utility you can easily change the screen mode that a program uses which is useful if the program itself won't allow you to do this. You can force a new 3D look to its interface and adjust the font that the program's interface will use. Because of the way it promotes the screenmode, you can also adjust the number of colours in the program's palette and whether it should use its own or share it with other programs.

TechnicalZone

CSH

Author: Andreas Kirchwitz and others

The AmigaDOS shell is a very versatile and usable way to interface with the Amiga, but you can now have even more features thanks to a complete new Shell called CSH. There have been versions of this around for years and this is the very latest one. There are full instructions on how to use it included with the program, but the important thing is to incorporate it into the CLI-Startup file in your S: directory so that CSH is started and used automatically in every Shell.

The main features of the new shell are piping, a simple history, aliases with arguments, variable handling, file name expansion using wildcards, filename auto-completion, conditionals, source files, object orientated features and internal commands for extra speed. This means that in addition to adding faster shell commands, CSH gives you a new range of commands, listed in the box. It also gives you a far more powerful way of editing and working in AmigaDOS as you can see from its editing features. The full list of editing features and internal commands can be found over the page - check them out!

UtilityZone

Mode Pro

Author: Michael Rivers

This is a mode promotion utility that allows you

The Editing features of CSH

MOVING

Left Arrow	One character left
Right Arrow	One character right
Shift-Left Arrow	One word left
Shift-Right Arrow	One word right
ESC-Left Arrow	Beginning of line
(^A) (^Z)	
ESC-Right Arrow	End of line
(^E)	

DELETING

Backspace	Previous character
Del	Character under cursor
ESC-Backspace	Previous word (^W)
ESC-Del	Next word
ESC-x-Backspace	To start of line (^B)
ESC-x-Del	To end of line (^K)
ESC-d	Entire line (^X)

HISTORY

Up Arrow	Recall previous commands
Down Arrow	Recall commands
Shift-Up Arrow	Get history from partial (or

number)

Shift-Down Arrow	Go below last command of history
ESC-Up Arrow	Get start of history
ESC-Down Arrow	Get end of history
ESC-! (or number)	Get history from partial
^T of previous line	Insert tail (all but first word)
^P (useful for mv)	Duplicate previous word

COMPLETION

TAB	Inserts first matching file name
Shift-TAB	Inserts longest common substring
ESC-TAB	Inserts all matching file names (also ESC-*)
ESC-c	Does a quick cd on left word (TAB for cycling)
ESC--	Inserts the last current directory
^D	Shows all files that match a pattern (also ESC-=)
ESC-p	Insert first/next matching program

name

ESC-P Shows all matching program names

EXECUTING LINE

Return	Executes line
ESC-Return	
Escutes this line of history & brings up the next one	
^N	Next line. Don't exec this one but store history
^\\	EOF (directly exits)

MISCELLANEOUS

^L	Retype current line.
^O	Echo a ^O
^R	Repeat last command (don't play with this)
^U	Undo/Redo last edit
^V	Quote next char
ESC-i	Toggle Insert/Overwrite
f1-f10	Execute command if variable exists.
F1-F10	More commands (Shifted f keys).
Help	Invokes help command

Internal Shell features of CSH

Abortline	class	fault	y	md	readfile	source	unalias
action	close	filenote	htype	mem	rehash	stack	uniq
addbuffe	copy	flist	if	menu	relabel	strhead	unset
rs	cp	flflower	inc	mkdir	resident	strings	usage
addpart	date	flupper	info	mv	return	strleft	version
alias	dec	foreach	input	open	rm	stren	waitforp
ascii	delete	forever	join	path	rpn	strmid	ort
assign	dir	forline	keymap	pri	rxrec	strright	whereis
basenam	diskchan	fornum	label	protect	rxsend	strtail	window
e	ge	getenv	local	ps	run	tackon	writefile
cat	echo	goto	linecnt	pwd	search	tail	
cd	else	head	In	qsort	set	tee	
chgrp	endif	help	ls	quit	setenv	touch	
chmod	error	history	makelink	rback	sleep	truncate	
chown	exec	howman	man	rename	split	type	

ProgrammingZone

This month's Programming Zone includes the tutorial code which accompanies the AMOS tutorial concluded this month on page 41, and also the code for the HiSoft BASIC tutorial which can be found on page 46.

InformationZone

This month we have a rather unusual text file for you. Have ever wanted a complete listing of the AS Coverdisks and Subs disks? Thought about cataloguing them but never found the time or energy? Well one reader, J Gray, has done exactly that and provided us with the complete listing. You can now load the text into any WP and do a search or set up a database easily.

Disk contributions

This month's disks were compiled using files from Aminet and with the help of the authors of the programs.

If you would like to contribute to a future disk, whether you have a full application, utility, 40K demo, clipart, font, 3D object, or even a module, send it to:

David Taylor,
Amiga Shopper Coverdisk Contributions,
30 Monmouth Street, Bath, Avon BA1 2BW.
Please only send the minimum distribution
archive. Also, please do not powerpack
(or similar) any files because it detracts
from the archiving.

Many thanks to him for this; it must have taken ages. Note that although the archive for the text is tiny, the actual text file is over 700K (text archives well) so it will take a long time to load in from a floppy disk.

Well, that's this month's selection of programs. There may not be many of them but they are all so good and useful that they were chosen over another collection of smaller utilities. There is still a diverse collection of programs, so hopefully some of it should suit everybody. Don't forget that we welcome reader contributions. Until next month, enjoy. ■

Dodgy disk?

To avoid errors when installing to floppies, ensure that your destination disks are of high quality. If an error occurs, try re-booting and using a different spare disk - the majority of errors are caused by faulty destination disks.

If your Coverdisk absolutely refuses to work and you are certain it is faulty, please return it, along with an S.A.E., to the address below. Please do not send faulty disks to the Amiga Shopper offices.

Amiga Shopper Coverdisk
(insert the name of the disk),
TIB plc, TIB House,
11 Edward Street,
Bradford
BD4 7BH.

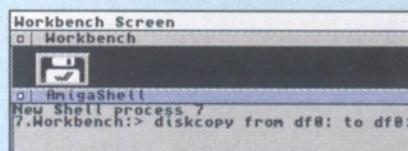
Beginners, look!



Before using this month's Coverdisk, please be sure to back it up - just in case. Simply follow the easy instructions below.



1 Boot up from your Workbench disk or partition, double-click on your Shell icon - to be found in your System Drawer.



2 If you only have one disk drive, type in the following line and then press Return.

Diskcopy from DF0: to DF0:

If you have two drives, place the Coverdisk in DF0: and a blank in DF1: then type in this line instead:

Diskcopy from DF0: to DF1:

3 Follow the on-screen prompts and remember that the Coverdisk is the source disk and the blank is the destination.

4 If you used the two-drive method, remember to rename the copy by clicking on its icon and pressing right-Amiga r.

5 If you have two drives, you can also copy the disk from Workbench by dragging the Coverdisk icon over the destination disk's.

6 Then place either of the Coverdisks in DF0: and reset the Amiga to boot it. It is best to boot disk 1 (or the Subs disk if you're a subscriber). This will let you install all the disks to either floppy or hard drive.



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News

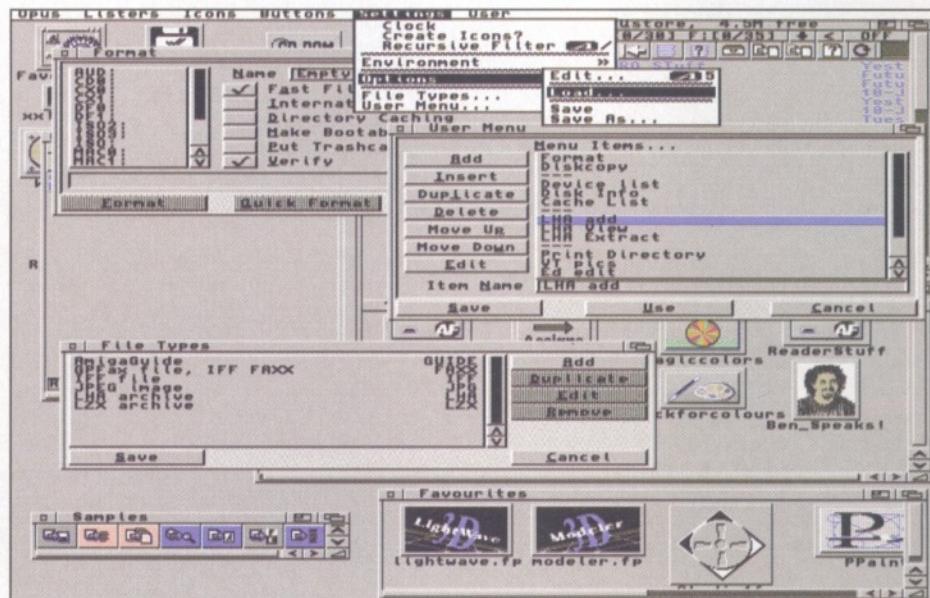
GPSoftware demonstrates its continuing support for the Amiga with the release of the new version of the Amiga world's most popular directory and file management utility. After more than 12 months of extra development, Directory Opus 5.5 is more of a new version than just a simple update and it contains many changes and enhancements over the original product.

After receiving many comments and useful suggestions from Opus users, almost every facet of the new program has been examined and subjected to user scrutiny, backed up by extensive field testing from very persistent Beta testers. This release extends the original Opus 5 concepts and provides many significant improvements in both operational power and usability.

Here are just a few of the enhancements:

- A new Icon Action Mode.
- Button banks and Listers need no longer be activated first in order to see right and middle mouse button clicks.
- WorkBench Replacement Mode has been enhanced.
- An integrated OpusFTP capability lets you access remote Internet sites directly from standard Opus Listers.
- Button banks can now be borderless with a sleek minimal dragbar instead of a full window border.
- New Filetype-specific pop-up menus allow special menus for icons and files. Use Filetypes to add custom menus for different types of files and icons.
- Custom buttons have a pop-up menu giving access to an extended selection of commands.
- New independent HotKeys are now supported.
- New Scripts system allows functions to be executed upon most system events.
- Custom menus have been improved with multiple user menus with sub items.
- New Automatic Filetype Creator allows you to create and test Filetypes with ease.
- A font viewer is now included. Just double-click on a font to view it.
- Listers now have field titles, single-click re-sorting by fields, plus a new version field which reads the internal version information from each file.
- New colour remapping of button and icon images with support for 'Magic Workbench' and similar systems.

Five and a half hits the streets



- Cybergraphics RTG now supported.
- You can now selectively hide unwanted drive icons from the Opus main window.
- Enhanced clipboard support provides full cut, copy and paste in gadgets and file Listers.
- Listers are no longer blocked while busy – you can now resize, iconify, and scroll busy Listers.
- Icon and Lister snapshots are now stored separately from Workbench.
- Listers can now display a background picture or pattern.
- A new internal Opus CLI allows you quickly test commands and ARexx scripts.
- Several new internal commands and many new ARexx commands have been added or extended with new features. You can now even add your own internal commands with ARexx.

For more details visit
<http://www.livewire.com.au/gpsoft/>
 DOpus 5.5 recommended price is £59.99. Contact Wizard Developments on 01322 527800

The long awaited successor to DOpus finally arrives along with an Internet incentive from Demon and a new magazine aimed at technology buffs...

Future aims at e

Future Publishing is to launch a consumer technology magazine in October which is targeted at the electronics marketeer's holy grail: the early adopter.

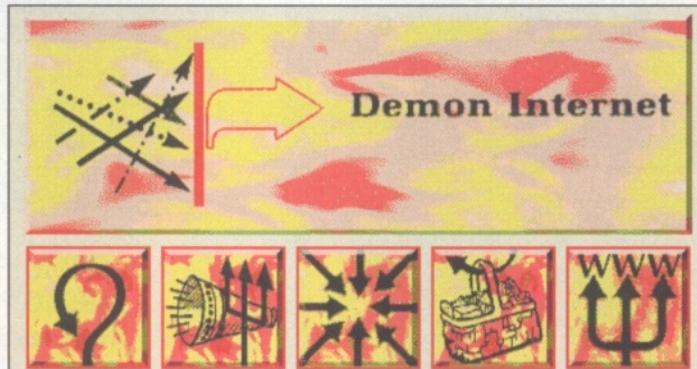
The magazine, entitled *T3: Tomorrow's Technology Today*, comes from the same stable as up-market technology titles such as *Edge* and *.net: The Internet magazine*. The title will balance discussion of technology breakthroughs in areas such as home cinema, computing, photography, personal communications and hi-fi with reviews of the most innovative new devices. *T3* will not carry a lengthy buyers guide like many titles in the home electronics market, but will instead be features and news led.

"*T3* is an entirely new kind of magazine which reflects the way

5Mb bonus from Demon

Good news for Demonites everywhere. If you have an account with Europe's largest ISP then you now also have 5Mb of free Web space in an unprecedented move by the pioneering provider. Unlike most ISPs that offer web space for free, and who give you an address something like "<http://www.isp.co.uk/~users/yourname/>", Demon are actually offering virtual Web serving with an address based on your nodename, ie. "<http://www.nodename.demon.co.uk/>".

Another unique factor here is that there is no restriction on whether you use your webspace for commercial activity, a big no-no with other ISPs.



Demon are also offering their customers four (and only four) CGI-bin scripts to make your site look a bit more professional. These include a hit counter, a server-side image map, a mailform and a test form.

A Demon account will set you back £12.50 + VAT to set up and £10 + VAT a month thereafter with 100% local access across the UK. For further details call Demon on 0181 371 1234, or visit their web site at <http://www.demon.co.uk>.

Amiga gets new owner – again

24th July 1996 – Bill Buck, CEO of VIScorp, sent a general letter to the Amiga community stating the terms under which Amiga Technologies was to be bought with special regard to Escom's financial difficulties. By the time you read this, Amiga Technologies will be part of a new company called VIScorp GmbH jointly managed by Petro Tyschchenko and new girl Raquel Velasco. In the states, Al Duncan, another familiar name from Commodore days will be joining VIScorp to handle the sales and distribution of the Amiga and other VIScorp products in North America.

Other news reaches us from the recent Amiga convention in Montreal, where there was a great deal of speculation over the future of the Amiga. From transcripts of conversations held at the convention it

AMIGA

may be gleaned that, in the short term at least, there were no plans to bring out a new Amiga before the RISC-based machines (the Walker was not even considered), but that there would probably be an O60 accelerator for sale before Christmas which would be for sale at "just over cost". No mention was made of which machine this accelerator would fit.

Talking of accelerators, the RISC chip that will power the new Amigas is still a matter of debate. Favour is falling away from the PowerPC CPU, but none of its competitors has yet been settled on. This is hard to reconcile with the idea that VIScorp will be able to show a new machine in a year's time, since converting the OS to a new chip, while retaining backward compatibility with older versions is a task that it has taken Apple four years to manage and they still aren't finished yet.

Titbits

Survival nut

Eric Schwartz in cameo gear, chewing tobacco and armed with an M-16? It's not an image that springs readily to mind is it? But Eric has come up with an idea to help promote the Amiga in the eyes of non-believers. His survivor picture is readily available from Aminet, or on our sister mag, Amiga Format's CD5. Eric exhorts everyone to print this image out and put it on T-shirts, posters, mugs, basically anything you can find that people will see and realise that although our machine has taken a beating, gone through three owners and can't be bought in shops anywhere, it's still carrying on regardless.

X-DVE 2.6?

Our illustrious editor is obviously a man of some influence. After reviewing X-DVE, the excellent animation program from Italy, he suggested to Class-X, the developers of X-DVE, that the current version would be improved if it included support for virtual memory.

Lo and behold, only a couple of days later, our very own Dave received a new version of the package – complete with support for virtual memory. Not bad, eh?

Partners with consumer technology magazine

that technology has become an essential part of our lives – and that technology is great fun!" commented publisher Stuart Anderton. "T3 is a magazine for people who love technology; people who love what technology can do in their home and in their car. Our research shows that the same people who are into home cinema are also interested in the latest computing gear and in personal digital assistants. Now more than ever people are fascinated by the whole gamut of technological innovation as it affects them, and T3 will deliver features, news and reviews to satisfy that need."

But T3 will keep its feet firmly on the ground, says Anderton: "We won't be doing any California dreaming about the influence of

technology on society. We'll be talking about the technology itself; the actual products which are here now or coming in the near future."

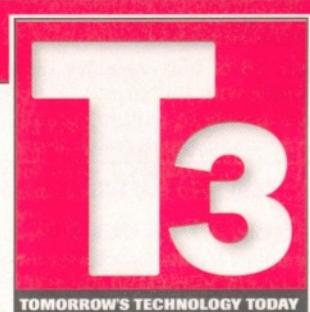
Future has put together a team of its leading lights to create the magazine. The editor is Steve Jarratt, who launched Edge and more recently Sony Playstation Magazine. Steve is one of the most experienced consumer electronics journalists in the business. Backing him up is Ed Ricketts, formerly of PC Format and .net, a writer whose flair and sense of humour make light work of the most technical subjects. Completing the in-house editorial team is Mark Harris, formerly a senior researcher at the Consumers' Association working on testing consumer electronics.

Says Steve Jarratt: "T3 is really going to hit blokes where it hurts – in the wallet. We're going to be showing them the coolest stuff around, helping them to lust after the latest gear, and explaining which technology they should be investing in. If you think high-tech gear is sexy, T3 is a top-shelf mag!"

T3 will be designed by Jacqueline Spanton, runner up in last year's PPA Designer of the Year awards, and winner of Future's internal Designer of the Year prize. Most recently Jacqueline launched .net magazine.

The commercial team for T3 is publisher Stuart Anderton, assistant publisher Alison Morton and advertising manager Damian Jennings.

T3 will cost £2.95 and goes on



sale in October. The launch is backed with above-the-line advertising in more than 20 consumer magazines and the national press, as well as promotions on the internet, London poster sites and at two consumer electronics exhibitions. Future Publishing is the fifth largest magazine publisher in the UK with over 40 consumer titles.

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Getting the most out of DTP

The computer was supposed to lead to the paperless office but instead it helped create a revolution in publishing. The Amiga is no exception and it has given me the tools to create a publishing business out of nothing.

Despite having acquired other machines like a PC and a Macintosh in recent years, my preferred option, believe it or not, is still the Amiga for much of my DTP work. So much so, that I have just finished publishing a manual for the Siamese System using Professional Page on the Amiga. I also use the Amiga to produce my own magazine, Em.

I have stuck with the Amiga because, contrary to popular opinion, the machine and the software still does what I need it to do on a daily basis and the occasions are very rare when I have to turn to one of the other machines to publish something. When I do decide to use the PC or Macintosh, it's usually only because a client has specifically requested I do so.

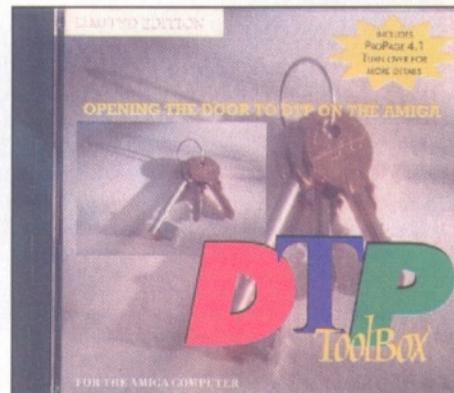
That's not to say that the Amiga is perfect though. The one area of DTP where the Amiga is badly let down is printing. I don't have to tell you that publishing and printing pretty much go

hand-in-hand, so I have always found it really difficult to understand why the whole printing side of things on the Amiga has never been greatly improved.

The problem lies in printing documents to non-PostScript printers. It can sometimes be very difficult to get your page to print exactly the way you want and the only advice I can give is to experiment and find out which programs work best for specific types of jobs. Or invest in a PostScript printer.

Lets get down to the nitty gritty though and discuss what you need to get started in publishing on the Amiga. The first thing that you need is some form of page layout software and that could be either a word processor or a DTP program. Then there are image processors, essential for working with images.

An image capture device such as a scanner or digitiser is also useful, as is of course, a printer. Now we've established what the main requirements are lets take a look at each item in more detail.



DTP ToolBox is a CD packed with applications and other stuff for Amiga desktop publishers. It includes 1000 PostScript fonts, Professional Page 4.1, photographs, clip art, indexes to the clip art on EMC's Phase 1, 2 & 3 CDs and a lot more. Call LH Publishing for details.

Run the Press

At some stage in your publishing career, you'll probably want to have your work printed on a printing press. Doing this is easier with a DTP program like ProPage or PageStream, because they allow you to do separations for spot colours as well as process colours, something a word processor doesn't allow.

POINTS TO REMEMBER:

Spot Colours

- A spot colour is a solid colour that is printed black on the artwork and the coloured ink is added later on the printing press. The spot colour can be dithered to produce lighter and darker shades of that solid colour. It is possible for example, to produce a blue gradient by printing it in shades of grey and having it printed using a blue ink.

- Be careful of overlapping colours. In most cases, the colours will be overprinted (unless your program supports "Knocking Out" overlapping) and if a darker colour is underneath a light colour, the dark colour will show through. See page 15 of September's Amiga Shopper for an example of how that looks in practice.

- The word Pantone refers to a colour catalogue of colours available for process and spot colour work. Only two DTP programs on the Amiga support Pantones, PageStream and ProPage.

- For each spot colour used in a document, you need a separation. If you intend having lots of colours, then go for process colours instead.

- Don't use imported colour bitmaps, because the colours in the image will not be able to be separated. If you have a bitmapped logo that you want to print green on the printing press, then make sure it is a solid black (or shade thereof). The green ink remember, will be added on the printing press.

POINTS TO REMEMBER:

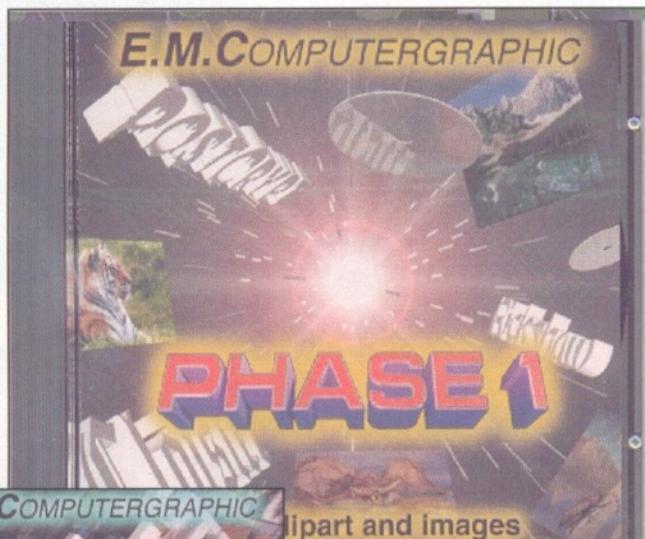
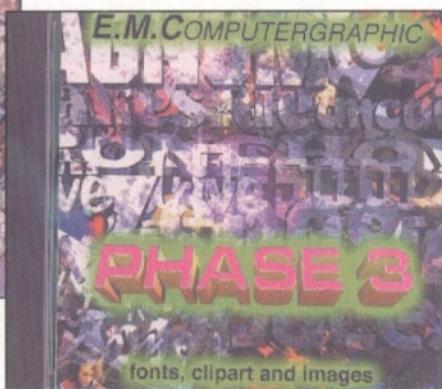
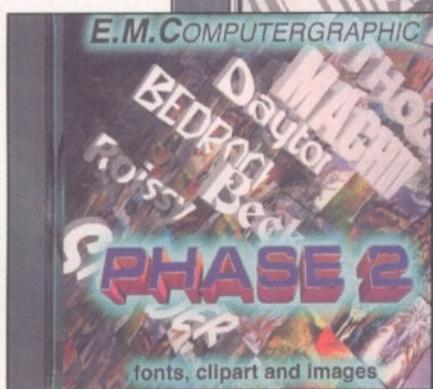
Four Colour Job

When a printer starts talking about a four colour job, they are generally talking about a full colour production using four process colours which simulate a full colour image just like in Amiga Shopper.

To do this you require a DTP program that is able to produce process separations. Here are some important points on process colours:

- Process colours are Cyan, Magenta, Yellow and Black.
- For each colour, a separation is required. Because these separations need to be closely registered (placed on top of each other so that the crop marks match up), four colour separations can only really be printed from film produced using an imagesetter.
- It is possible to have documents with both spot colours and process colours.

One of the best sources for clip art and fonts for the Amiga is a series of CDs published by EMC.



Jargon

WORD PUBLISHER: A cross between a word processor and a desktop publishing program. Final Writer and Wordworth are word publishers.

SEPARATION: Also called a "sep". When printing in colour, it is normal for each spot colour or for each process colour to be printed on a separate sheet of film and printed individually. When this is done, the separation is printed as black or as a shade thereof. The colour comes when the ink is applied on the printing press. In the case of process colours, four sheets of film are normally used and when they are printed, they can simulate a true colour image in much the same way a four colour ink-jet lets you print photographic type images.

SCANNER: An electronic device which uses reflected light to create a copy of an image which can be digitally transferred into your computer. Available in a number of types such as hand or flatbed.

IMAGESETTER: Put simply, an Imagesetter is a high resolution black and white printer. It is used to produce colour separations which are printed using a black image on film or bromide (a photographic type paper). Most imagesetters are run from a Macintosh, PC or Sun workstation. Not usually found attached to an Amiga.

FONT: A style of typeface in a particular format. The Amiga can make use of bitmap fonts as well as Compugraphic, Type 1, Nimbus Q and Soft-Logik outline fonts.

Page layout software

First and foremost, you need some sort of publishing program. This can be a word publisher like Wordworth or Final Writer, which no doubt most of you will already have, or a program that will give you more freedom with your page layouts such as desktop publishing packages like Professional Page or PageStream.

The latter two programs are very flexible. They let you treat a page like you would if cutting and pasting text and pictures manually. In other words, anything goes. This is very different to a word publisher like Final Writer or Wordworth which are column based. This means they are based around single or multiple columns of text which flow from page to page.

Each type of program has its own advantages and disadvantages. For me, the main advantage to a word publisher is its extra tools for working with text. In programs like Wordworth and Final Writer, you have tools for creating tables, a thesaurus for never being short of the right word, end notes and footnotes for technical documents, support for contents and index generation and many other functions.

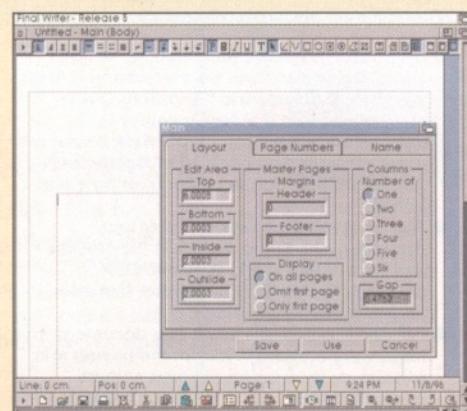
The word publisher is generally easier for things like letters because it was designed for this purpose. Basically, run the program and start typing. This is why letters I require are produced in word publishers on the Amiga while my magazine Em and other things are done in Professional Page.

There are however many things you cannot do with a word publisher. Text has to be placed in a main column and although you can have multiple columns, they can't be picked up and placed anywhere on the page like you can in a DTP program. Recent improvements in word publishers enable you to have some text outside

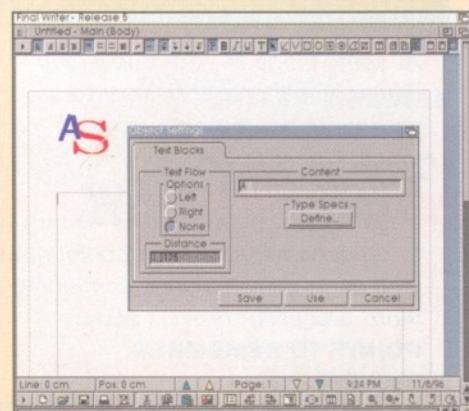
the main column by using frames or tables, but these cannot be linked so text flows from page to page.

I also found that word publishers on the Amiga don't allow you to do spot colour separations and process colour separations. This is something worth considering if you want

Letterhead tutorial



1 Create a page with a large top margin. Also make sure you know where your printer's hardware margins are on the page.



2 Create a simple logo. This one was done using Final Writer's text block tool. See if you can do any better!



Word publishers like Wordworth and Final Writer are capable of much more than just producing letters. This calendar was created in the latest version of Final Writer.

to have your work printed on a printing press.

Such drawbacks are not present in a DTP program. These give you complete freedom of the page, generally have better graphic support and, at the end of the day, have been designed with publishing in mind.

Which type of program you choose depends on your work, although with the price of both DTP programs and word publishers at rock bottom at the moment, it is useful to have both in your toolbox and then you can choose the right tool for a specific job.

Capturing that image

But you need more than just a publishing package to get to grips with DTP. Most publishers need pictures and because of that, an image processing program is useful. It is well known that a large percentage of available clip

art and photographs are in formats other than the Amiga format of IFF-ILBM. Because of this, you will find a program to convert one format such as JPEG to IFF-ILBM, very useful.

There are plenty of programs that will do this including ImageStudio, Photogenics and ImageFX 2.6. ImageStudio has the advantage of being very cheap as well as being able to work in low memory situations. The other two packages have many special functions for creating effects that will add impact to your DTP work.

At some stage however, you will need to use images suited to a specific subject and this usually means capturing an image using a device such as a scanner, PhotoCD or digitiser. Which one you choose, depends on many factors.

PhotoCD is an excellent choice but in most cases, you have to wait a long time for the CD

to be produced and in publishing, where deadlines can be tight, you may not have the luxury of being able to wait. The quality of the images on PhotoCD is however, very good. Far better than you'll see if you have your pictures developed at a one hour lab.

Scanning is also useful because you can scan an image when you require it with no need to wait. Choosing a scanner depends yet again on budget though. With the price of a decent flatbed now in the £300 bracket, if you can afford it, go for that because although hand scanners are cheap, they are restrictive and in the long run, you'll probably end up longing for a flatbed when you see the quality they produce.

The last image capture device, is a video digitiser. This is a piece of hardware that converts the images on video tape or those coming from a video camera, to a form understood by your Amiga. The great advantage to video digitiser is speed. Just point the camera at the required object and go for it. The drawback is quality. Not so bad for objects like the mug shot of the managing director but not so good for pages of text for OCR or even photographs which need to be placed on your page.

Getting Fonts for your DTP

There are a couple of good sources for fonts but before you get the plastic out, here are some points to note. First of all, get a CD player. Buying fonts on floppy disk is an expensive business and you will recoup the cost of a CD player on the savings made in buying fonts (and clip art) on compact disc.

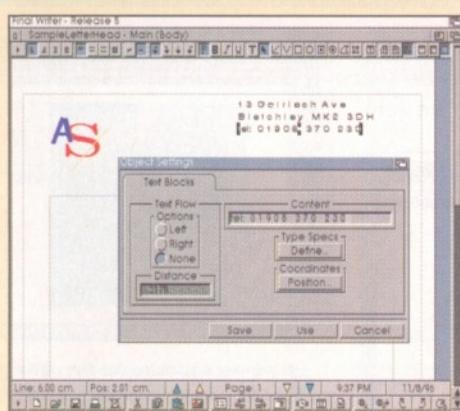
Secondly, make sure that the fonts you get are well laid out on the CD so they are easy to find and are accompanied by either printed examples, or pictures on the CD, of what each font looks like.

Thirdly, make up your mind what you want to pay for. There are two main types of font CDs available, ones with shareware fonts and others containing commercial fonts. Having most of the shareware type fonts, I found I had

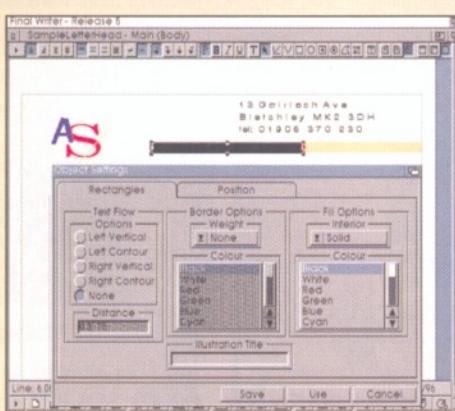
to look at PC CDs for better quality fonts. I ended up going for Corel Draw 4 which is available for under £90 and contains more than 800 commercial quality PostScript and True Type fonts. Even if you have no use for the rest of the package, that many fonts for under £100 is a very good price indeed.

There are many more CDs available for the PC and the thing to look for is that the CD contains PostScript Type 1 fonts and that these are commercial quality and not shareware.

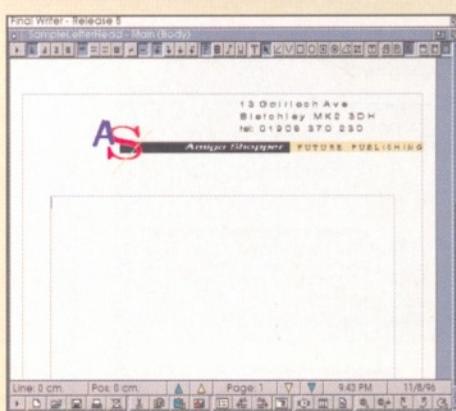
Finally, be careful, because many of the CDs (especially shareware ones) contain the same fonts, so look at them all carefully and buy the best one available and you'll save money in the long run.



3 Using the Text Block tool in Final Writer, I created the address. Notice how spaced out the text is. In FW, I used the space bar. In ProPage, I use the tracking feature giving greater control over the amount of space between letters.



4 Two boxes are created in different colours and then grouped so they can be moved about the page as if they are one object.



5 The last job is to place some text blocks over the boxes. The letterhead is now ready to be saved as a template and used for all further correspondence.

Quality like beauty however, is in the eye of the beholder and everyone has a different opinion on what is good and what isn't.

Adding some structure

The images we have talked about so far are bitmap images. Many of you will also find a need for structured drawings which can be used with logos and so on. Here at LH Publishing we use Gold Disk's ProDraw, but it's no longer being sold and is hard to come by except for some upgrades to a Coverdisk we market here.

Design Ideas

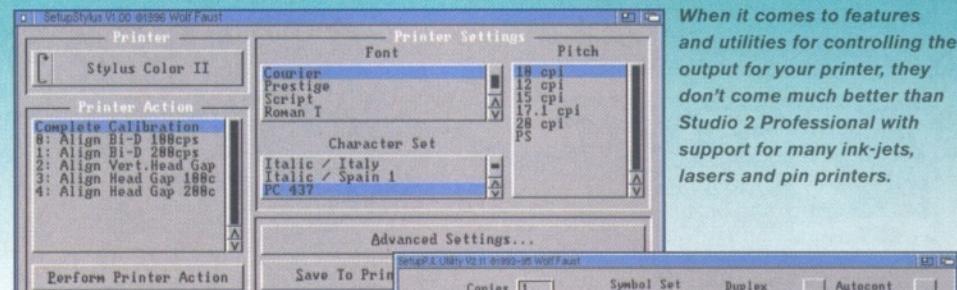
When thinking about the design of a document, look at how others do it and make notes. Look not only at printed matter such as magazines, but also at design ideas used on television. Some of the hottest ways to use text appear on the box. Who said it wasn't educational?

Removable Media

When you need to move large files from one computer to another, it's very difficult because there are so many different types of removable drives used by different bureaus and printers. When choosing your own drive, find out what sort your publishing bureau uses so you can make sure it is compatible with yours. A sure-fire medium is CD and with CD writers coming down in price, it's a good way to go as most bureaus have a CD player.

Paper Chase

Most publishers spend a lot of time creating the document but none on choosing the right paper the document is to be printed on. There are thousands of interesting papers out there, so start putting together your own sample pack so next time you do something, you'll have the right paper for the job.



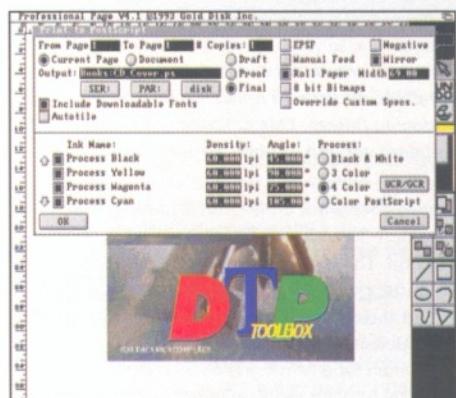
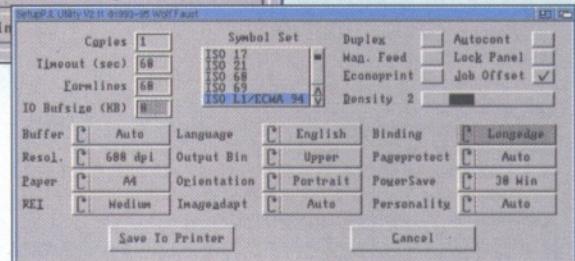
The reason we use ProDraw, is because there is a hotlink between it and ProPage, which we find very useful for sending images back and forth. If however you use a word processor like Wordworth or Final Writer, ProDraw is not going to be that useful and although I expect ProVector 3 is still being sold, I had a quick glance at the latest issues of Amiga Format and Amiga Shopper and I can't see it being advertised anywhere.

There is a shining light however in that the authors of ImageStudio, Andy and Graham Dean, are planning to release a drawing program called Draw Studio which we'll give you more news on as soon as it's released.

Putting onto paper

After you have the tools to create your masterpiece, the last step is having the software to drive a printer to produce the best possible quality on paper. At the moment, there are two products worth having for this, one is Studio 2 by Wolf Faust and the other is TurboPrint 4.1 by IrseeSoft.

Both are very good products in their own right and will enable you to get good results from modern printers like the Epson Colour Stylus, the DeskJet 850C, LaserJets and many others. They don't solve all the problems the Amiga has in printing though, so don't expect to see the same level of speed and quality you might get from a PC for example. They do make a significant difference however.

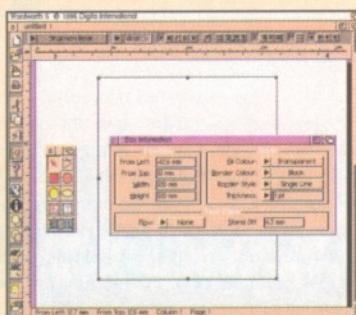


If your work requires colour separations for spot or process colour, then you'll need a desktop publishing program like Professional Page 4 or PageStream.

Both Studio and TurboPrint are printing enhancement products that also come with printer drivers. The programs serve two purposes. One is to help you drive modern printers (like the Epson Colour Stylus) for which no standard Amiga printer driver exists. The second purpose is to improve upon the woefully

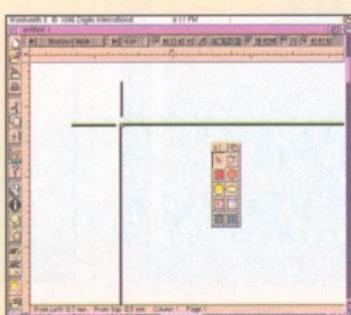
Page Design

1 Create an A4 page that sits upright (portrait)

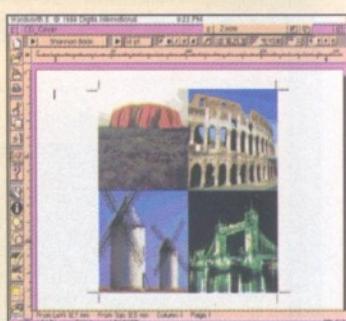
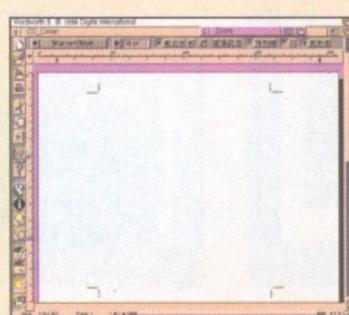


2 Create a box 120mm square. If it doesn't look square don't worry - this is a by-product of the screen mode you're using and the way a program looks using that screen mode.

In this tutorial, I want to show you how to create a CD Cover. The program I will use is Wordworth, although you can do this in many other programs like ProPage, Final Writer and so on.



3 Create small crop marks on each corner of the box so you know where to trim it when finished. When you are done you can delete the rectangle.



4 Import a picture for the cover and size it so the picture fits over the space occupied by the rectangle. Don't worry if the image is slightly bigger around all four sides because when trimmed, it will end up being the right size thanks to the crop marks.

Want to know more?

Of course you do! There are various avenues open to you to learn more about publishing. The main one is books. There are plenty out there on design, text, fonts and lots more. Take a trip to your local library and you may be surprised.

You could try my magazine, Em, which has a healthy DTP content in each issue and all you have to do is call me at LH Publishing for details.

We also have open day courses where you can try out all sorts of hardware as well as other types of computers. And lastly, practise does indeed help make you better so keep on keeping on.

inadequate printer preferences the Amiga has to put up with.

Hardware

Having all this software can require a lot of hardware and although I know many users who manage to get away with the base machine with its 2Mb of memory and a hard drive, I also know that if you stick to such low memory configurations you will be severely restricted in the type of things you can create and what you can print.

At the end of the day however, the important point is not what I think you should have for publishing, but for you to buy what you are comfortable using. And therein lies a problem. How do you get to test programs and hardware before splashing out?

Anyone wanting an answer to that may want to call me at LH Publishing because we quite regularly have invitation open day courses for Amiga owners to come along and try out the packages of their choice as well as experience the world of the PC and Macintosh. ■

**Call Larry Hickmott at
LH Publishing on
01908 370 230**

Contacts for Desktop Publishing

Artworks: When it comes to clip art, why not give Artworks a try? They produce "off the rack" clip art in bitmap and structured form as well as having a custom design service. Call them on 01469 588 138.

Digital International: Publishers of Wordworth 5, one of the best selling word processors on the Amiga. They also produce a suite of other programs and clip art packs. Also distributors of PageStream 2 and TypeSmith from Soft-Logik. Call them on 01395 270 273.

EMC Computergraphic: CD developers (Phase 1, 2, 3 & 4 plus others) and long time supporters of desktop publishing on the Amiga. Contact Errol on 01255 431 389 for fonts and clip art.

Eclipse Image Creation: Printers. This company understands Amiga technology and their prices are hard to beat. Specialise in spot colour work. Phone 01908 695 454.

Eyetech: Distributors of EnPrint, a printing enhancement package for the Epson Colour Stylus. Contact 01642 713 185.

HiSoft: Distributors of Studio 2, the printing

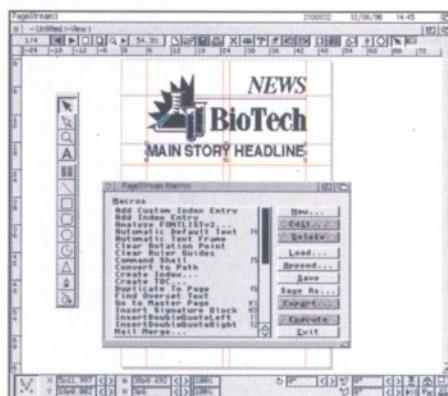
enhancement package. They also do CD-ROM drives and SCSI controllers. Phone 0500 223 660 for information.

LH Publishing: Publishers of CDs and the magazine EM which is heavily into Amiga DTP. Headed by Larry Hickmott, you can call LH Publishing on 01908 370 230 for information on EM magazine, the DTP ToolBox CD, ASDG style scanner cables, DTP Open days Courses, as well as Professional Page 4.1.

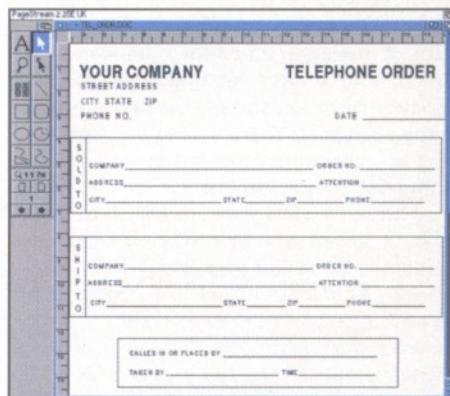
Power Computing: Contact Power for a number of useful products including scanners and OCR software. Number is 01234 273 000.

Softwood Europe: Distributors of all Softwood Products including Final Writer, Final Calc and many others. Softwood Europe also have many good quality Clip Art and Outline font packs available for Final Writer. Contact them on 01773 836 781.

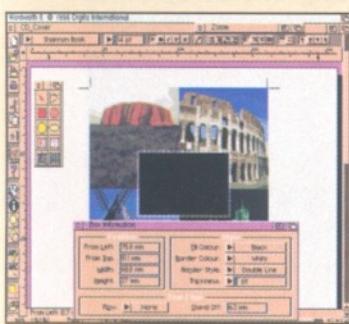
Wizard Developments: UK distributors of two products useful in publishing. One is TurboPrint 4.1 (printing enhancement package) and the other is ImageFX 2.6 (image processing). Wizard's number is 01322 527 800.



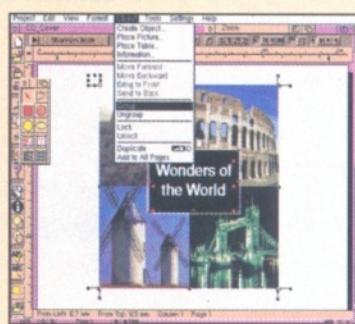
The most powerful DTP program on the Amiga, PageStream 3 from Soft Logik is nearly finished. Just be sure you have lots of memory.



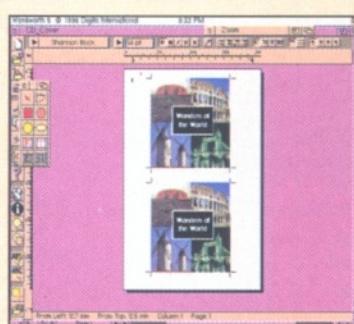
PageStream 2, the DTP program from Soft Logik, is now available in the UK from Digital International, publishers of Wordworth.



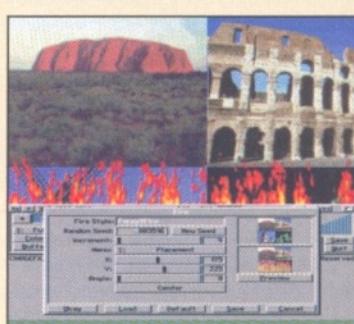
5 With the image in place, use the drawing tools to place a black box over the centre of the image like this. Some programs will allow you to place a fancy border around it like a double line as seen here.



6 Now place some white text over the black box. In Wordworth, you would use a Text Frame and in Final Writer, a Text Block. Make sure the text is bold so the white space doesn't fill in with black.



7 Now use the program's Group tool to group all the elements and then duplicate them.



8 Position the second group underneath the other one and you are ready to print the page. Make sure you save your document first in case you have problems during printing.

Storm C

Great things have been expected of the long awaited Storm C/C++ compiler. It hit the UK shores just a week or so before we went to press. Paul Overaa has been putting the package through its paces...

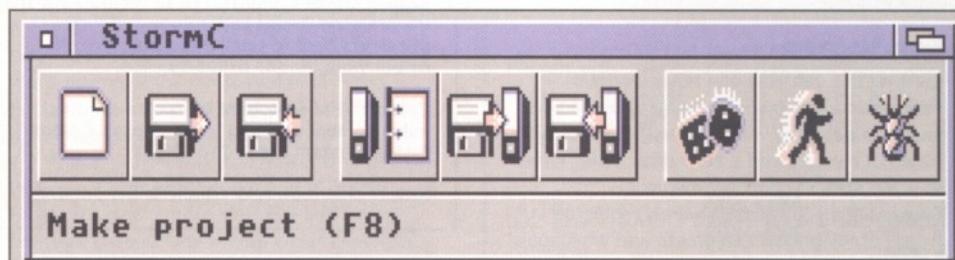
Storm C is produced in Germany by a company called Haage & Partner. It's been around in Germany for some time but the English translation of the manual and disk docs has only recently been completed. There are both CD and floppy versions available and in the latter case the software is supplied as a set of four disks. The main components of the package include a project manager, an editor, compiler, linker, source-level debugger, the standard function libraries and of course the official Amiga headers. There is also a librarian and an assembler provided along with some example programs.

Perhaps the first point that should be made is that in order to use Storm C you'll need a hard disk machine (running at least WB2) with a minimum of 3Mb RAM. Setting the package up is, as you'd expect nowadays, a pretty straightforward affair - there's a standard Amiga installer script and basically you just click on the associated (English) install gadget and follow the instructions.

The Documentation

Storm C's printed documentation, relative say to what used to be provided with SAS/C for example, is slight - a mere 200 pages. The reason is that the library function descriptions, which occupy the bulk of most compiler manuals, are provided on disk in the form of a 350K AmigaGuide help file. This has obviously been done to help reduce the size, and therefore the cost, of the printed manual and one of the benefits of this arrangement is that it has also been possible to supply Amiga run-time library docs in the help file as well.

All too often, when a package migrates from one shore line to another, it's the manual translation that provides a potential weak point (understandable since technical translation is an extremely difficult job). It must be said that there are many areas in the printed Storm C manual where the documentation could be improved - there are, for example, places where translated phrases have ended up making their point in a rather awkward way and, more importantly, in a way that could confuse a newcomer. I didn't find the manual hard going as such - but whilst the odd translation hiccups would not worry anyone



In many cases this toolbar provides all the access points that you need for creating, compiling and debugging your C programs.

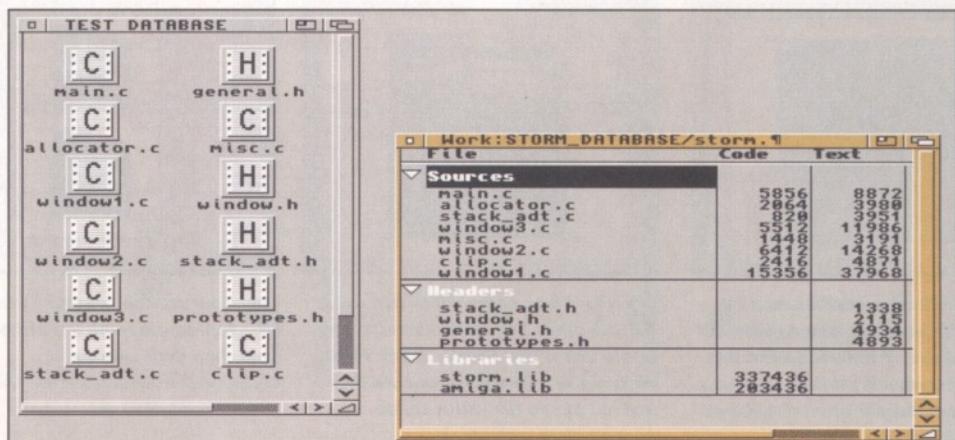
with previous experience of C, a complete beginner is likely to find the translation-related snags more of a problem. After all - no newcomer to C programming ever finds their first encounter with any compiler easy at the best of times. Do bear in mind however that I am only talking about odd phrases here and there - some parts of the manual have been very adequately converted from their original form. There is, for example, a very useful (and very readable) introduction that includes a step-by-step beginners tutorial which gets you to the point where you've compiled and run that all-important first program.

The Compiler Environment

Storm C's compiler, linker and so on are controlled by a front end called StormCCP,

which provides both toolbar control for compiling, debugging and project handling and an extensive set of menu options. One nice thing about the toolbar is that help messages, which explain the purpose of particular toolbar icons, automatically appear whenever you move the pointer into the icon area (the same thing happens with the controls on tools like the debugger as well). This sort of prompting is commonplace in Microsoft Windows applications but it's still fairly rare with Amiga software - and nice to see on this occasion!

The compiler environment itself is project based and so the first step when using the compiler is always to create a project file for your work. Once this has been done individual source, header files and so on, can be added to the project description. Adding a file to a project can be done either from the menu or by 'dragging and dropping' an icon into the project



As files are added into a Storm C project they are identified automatically, categorised and then added to the appropriate part of the file window.

window and of course this latter pathway is particularly useful when you are moving a complete multiple-file project from one compiler system to another (something which I did on many occasions whilst preparing this review). If, incidentally, you want to create a new file you just add the file name to the project and a new file will be created the first time you attempt to edit it. This project based approach is, of course, exactly the same type of arrangement as is used with Dice C.

Storm C's front end is a joy to use and this became obvious within a very short space of time. As files are moved into the project description they appear automatically in the appropriate categories - sources, headers, executables, libraries etc. To edit a file you just double click the filename... it's as simple as that! The file category displays can, incidentally, be 'folded' by clicking on their associated triangle gadgets. The entries in those sections then become invisible with only the section headings showing. When you need to see the file details you just click the triangles again and the sections expand to their original form.

In most cases the task of compiling and linking programs is totally transparent. A single click on the toolbar's Make button is enough to cause Storm C to compile, link and so produce the executable version for you (this also applies to large multiple-file projects as well as simple single file programs). For anyone wanting to learn C these days, this type of arrangement is particularly useful because it means that the task of identifying file dependencies, and creating link-files and make-files (which many people find confusing at first), is completely eliminated.

The compiler itself has all the usual bells & whistles including code optimisation and the ability to perform function in-lining (a big help where fast running code is needed whilst maintaining the benefits of having routines written as nicely isolated function calls).

The Editor And Debugger

The Storm C text editor is a nicely thought out, easy to use, offering with all the normal block cut & paste, search & replace, type facilities you'd expect of a modern editor. Where it scores hands down however is that it also provides colour keyword high-lighting (and what's more the colouring arrangements are user-editable as well). Anyone who has been involved with C/C++ programming on the PC will know that packages like Borland C/C++ have provided source code editors with colour high-lighting facilities for a great many years. With Storm C we have, at last, got similar facilities on the Amiga.

As well as keyword high-lighting and so on there are also other things of particular interest to C coders such as auto-indenting. You can, incidentally, set the indent level to any number of spaces before or after the opening brace reference point position.

The source-level debugger made a good impression too. It's a multi-window tool that, unlike some debuggers, is easy to use especially since, as mentioned earlier, status line

```

/* Work:STORM DATABASE/main.c
E T S I O R M X: 1 Y: 34 L: 426
*/
#define _ALLOCATE_GLOBALS
#include "workbench/startup.h"

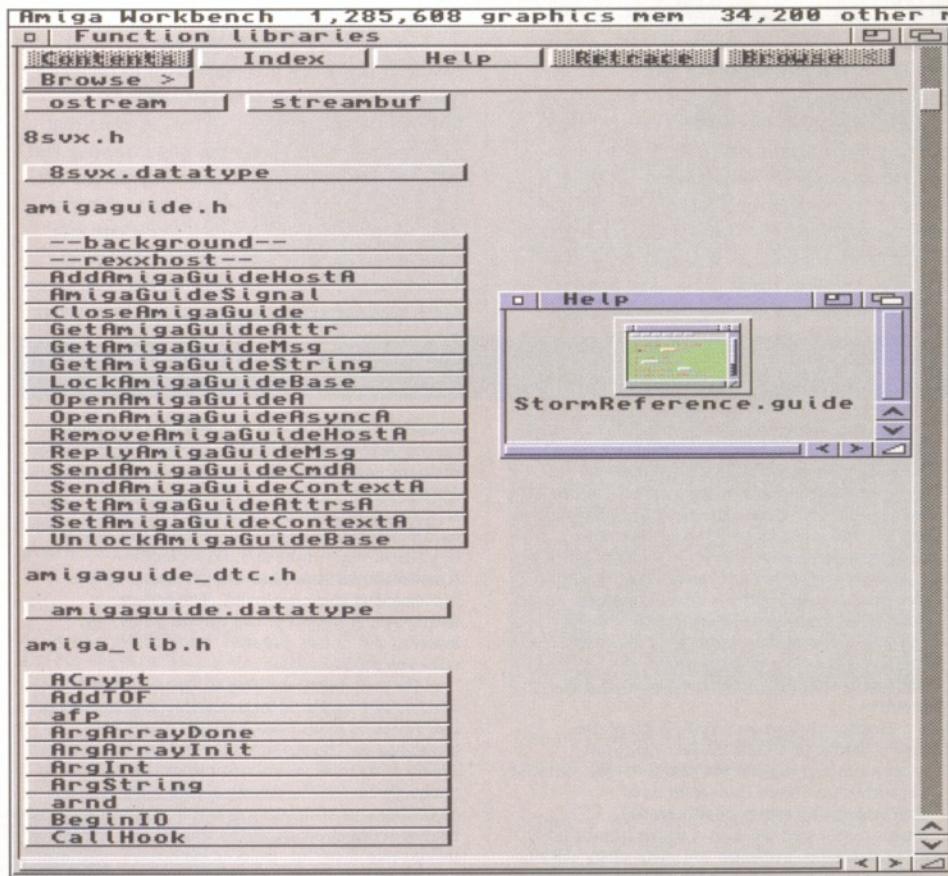
#define MAIN_COUNT 6
UBYTE (*main_list[])(void) = {
    OpenInt,
    OpenGraphics,
    OpenGrafTools,
    OpenDisk,
    LockScreen,
    GetVisInfo
};

UBYTE (*event_handler[])(void) = {
    EventHandler1, /* not using zero entry */
    EventHandler2, /* entry 1 for window 1 */
    EventHandler3, /* entry 2 for window 2 */
};

int main(int argc, char *argv[])
{
    UBYTE i,error_number=NO_ERROR;
    TEXT *s_p="DannvDannvDannvDannv";
    if(!(*resource_stack_p>CreateStack(void **))) error_number=NO_STACK;
    else {
        /* attempt to allocate resources... */
        error_number=AllocateResource(MAIN_COUNT,main_list);
        if (error_number) CapFailure("NO");
        else {

```

Colour high-lighting - not just pretty but useful too and good to see on an Amiga C compiler at last!



With the Storm C package all function docs are provided in AmigaGuide form.

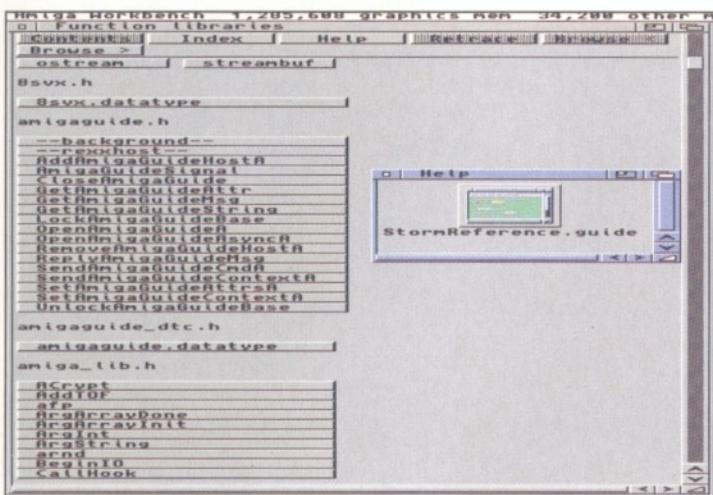
help is always available. Facility-wise the debugger offers all the usual single-step/breakpoint controls, variable and function inspection facilities, plus some useful extras like resource tracking.

How Things Went In Practice

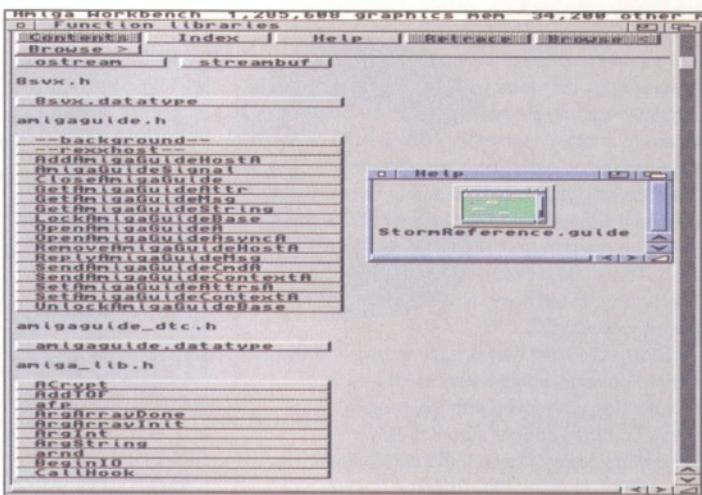
After a week of fairly extensive trials I've got to admit that I'm already hooked on this package. As far as existing code goes there's been little in

the way of portability problems although there were a few obvious changes to contend with: When moving what were originally Dice C projects over to the Storm C environment for example it was necessary to eliminate the Dice specific functions such as wbmain().

The only weak moment I had was when an old ANSI/C project of over a dozen files produced prototype errors for one of my list-based resource allocation functions. The function, in this case originally written with SAS/C, was using this prototype...



There's plenty of flexibility in the Storm C compiler itself too.



Storm C's source level debugger has been well designed and is easy to use.

UBYTE AllocResource(UBYTE count, UBYTE (*list[])())
and the Storm C compiler didn't like this arrangement at all. It wanted an explicit void reference on that terminal list function pointer and so, before the compilation would go to completion, the prototype had to be changed to...

UBYTE AllocResource(UBYTE count, UBYTE (*list[])())(void)

One area where existing code will need to be changed incidentally is for forcing graphics data into chip memory. There's no chip memory keyword with Storm C as such and an explicit #pragma directive needs to be used instead – so if you've got source code files with arrays

designated in this sort of fashion...

```
UWORD __chip titledata[] = {  
0xFFFF, 0xFFFF, 0xFFFF... etc }
```

you'll need to change them to this form...

```
#pragma chip UWORD titledata[] = {  
0xFFFF, 0xFFFF, 0xFFFF... etc }
```

Minor changes like this often have to be made when code is moved from one compiler environment to another and they're of no real significance at all. In fact the good news is that I actually moved projects containing almost 1.2 Mbs of code written initially using a variety of compilers including SAS/C, its predecessor Lattice C, Obvious Implementations Dice C. I even recompiled a few plain vanilla C files and C++ stack abstract data types and so on that

had been originally written for use under Windows 3.1 using Turbo C++. In all that's many thousands of lines of code and I think the only snags that cropped up were those very few points I've just mentioned. And in my book that's pretty good going – so I'm nigh-on 100% certain already that no-one is going to encounter much in the way of difficulties when moving existing projects over to the Storm C environment!

The C++ translator also handled some, admittedly small, C++ examples knocked up for test purposes without problem (although overall compilation times did increase due to the additional C++ -> C translation steps involved). The reason, incidentally, that I wasn't able to try any ports of large scale C++ projects is that I didn't have any suitable Amiga code available. The practical reason for this is simply that there has always been a lack of C++ support from Commodore, Amiga Technologies etc., as far as standard class definition headers are concerned (see the C++ box out for more details).

The Bottom Line

OK I admit it – I like this package a lot. Storm C is a nice, solid, product that has proved particularly easy to set up and use. It has ended up with a low rating primarily because the current asking price is far too high. And of course this makes for the start of a vicious circle because... if people aren't going to buy Storm C, magazines like ourselves will not be asked to run tutorials etc. So the package will not get the exposure that say Dice C gets. And that of course is bound to hit sales in some way.

Come on guys – get back into the real world – and cut the cost of this package to about a third of that currently being asked. You've done some great work but it'll all be wasted if you end up only selling Storm C to a handful of rich guys! ■

The C++ Connection

Amiga users get little in the way of exposure to C++ so in this respect a little introduction is in order. C++ is an object-oriented programming language developed during the early 1980's at AT&T Labs by Bjarne Stroustrup and his research team. One of the most important extensions that C++ offers is a construct known as a 'Class'. It's a bit like a C structure but holds both data items and functions (more usually called 'methods'). You can also restrict the visibility of class items by declaring them as private and this sort of information hiding is extremely useful in practice.

Encapsulation and 'data-hiding' are fundamental to OOPs (object-oriented programming) languages like C++. By defining objects which have their own data characteristics and procedures the programmer can work at a much higher level of abstraction, avoiding the nitty-gritty details that make the programming of larger projects difficult in other languages. The idea is that not only are class users protected from underlying implementation details but the implementation can even be altered (eg improved) as long as the visible, ie public, class function interface does not change. It is this characteristic that helps promote code reusability. ADT style code can of course also be implemented in C but C++ makes both code reusability and higher-level functional abstraction much easier to accomplish.

Classes can have all sorts of other goodies attached to them including things called constructor and destructor functions. The basic ideas here are quite straightforward – constructor functions are automatic initialisers that are executed at the point

where a class instance is defined. Destructors do the reverse jobs, ie they perform operations that are carried out when a class is deleted. If, for instance, you were defining a class representing a Stack data structure and using list-based schemes internally to create the stack, you might use a constructor function to set up a list header node that represented the empty list. Similarly a destructor function could delete all of the internal list nodes present in the stack, along with the stack header.

There is however one snag concerning the use of C++ in its object-oriented capacity that continues to hold back general interest in this language on the Amiga. It's nothing to do with Storm C as such, but what are really needed to make C++ a viable development language for everyday users are C++ specific header files that provide class-oriented definitions for things like Intuition objects (windows, gadgets and so on). Creating such headers is certainly not an easy job (there have been a few attempts) and it does really need to be done by either VIScorp or some VIScorp-authorised third party developer. The alternative scenario, the one that we now have, is that all C++ coders develop their own Amiga-oriented class definitions and this is no good at all – it's the C++ equivalent of all C programmers creating their own versions of the conventional Amiga header files!

Despite this long standing problem, as far as Amiga OOPs programming is concerned the good thing of course is that Storm C does at least provide a realistic way of getting some footholds into C++ coding and this is something that a lot of Amiga users are going to be very interested in!

Storm C Compiler

Price: £269.95 (£179.95 if you're using another C compiler and wish to swap to the Storm C package)

Supplier: Blittersoft

Contact: 01908 261466

Verdict: 82%

Termite TCP & IBrowse

There's plenty of Shareware software available for the Internet so why would you want to go out and buy a package.

Well there are advantages as Graeme Sandiford points out...

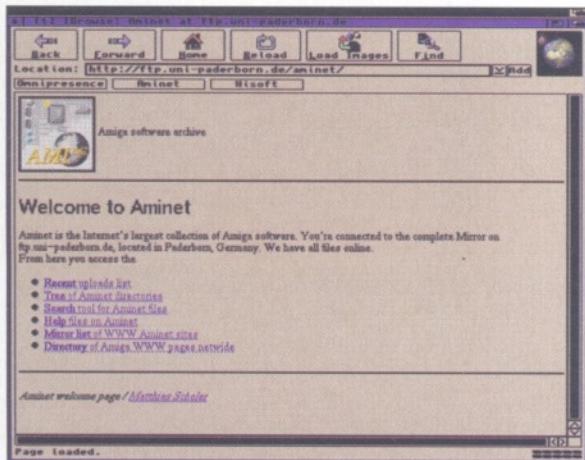
The Internet is big, and what's more it's coming to get you. You can't hide and you can't even run away because wherever you go Internet-awareness will track you to the end of the Earth. Whether it's from throngs of well-meaning friends or a constant stream of web-site addresses tacked on to the end of TV advert, you simply can't escape it. It's almost possible, in some William Gibson-esque way, to see it pulsing beneath our feet as we walk down the street.

However the Internet is good, the Internet is our friend and an almost inexhaustible recreational and business tool. Unfortunately many people are scared of jumping onto the Information Super-highway. Not because they find the Net itself frightening, but because of the technical knowledge and the associated hassles.

It has always been worse for the Amiga would-be-surfer who has also had to contend with the ignorance of the majority of Internet Service Providers (ISP) with regard to the Amiga and its capabilities.

It is also far from easy for the average Amigan to gather and set-up all of the software necessary to get on-line. The software is all out there, floating in the ether of the Internet and available from PD libraries, but up until now there has never been a complete Internet solution that's fully integrated and truly easy to use.

Activa are just one of the Amiga developers that have support sites on the Internet.



The minimum requirements for both products are very low indeed (Termite needs WB2 and 1Mb RAM, IBrowse needs 3Mb RAM, 3.5Mb HD space, WB3 and an O20 processor). However these are the minimum and if you want to get the best out of the Internet, in particular the World Wide Web, you'd benefit greatly by having plenty of RAM and a fast processor.

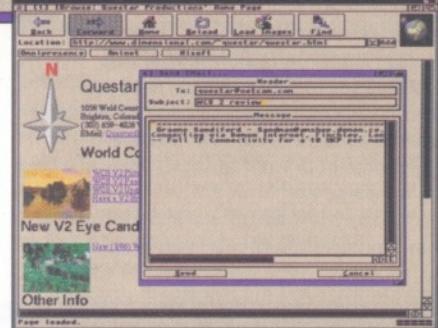
The backbone of this package, and indeed the whole of the Net, is the TCP protocol. You can think of TCP as a language that the computers on the Internet use to communicate with each other. This

Access to classic web-sites, like the infinitely useful Aminet can be yours with no hassle.



Making it's bid to become the first package to change all this is a double-pack of two programs – Termite TCP (TTCP) and IBrowse – developed by Oregon Research, Omnipresence and Hisoft to operate together seamlessly and to be as easy to use as possible.

These products are being distributed in the UK by HiSoft who are, coincidentally I'm sure, also the developers of the Surf Squirrel. So, if you are really serious about getting into the Internet in a big way then they're the people to speak to, as they can kit-you-out with both the hardware and the software.



IBrowse has limited capabilities built-in, so that you can make use of email links.

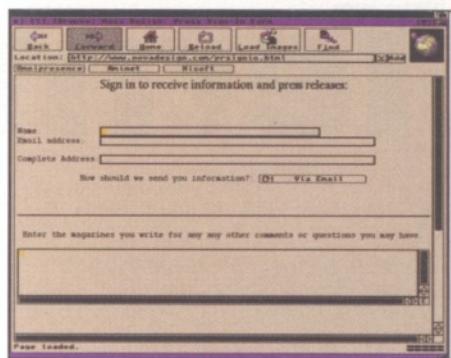
aspect of your Internet activity is handled by Termite TCP. Termite TCP's job is to log on to your service provider and establish a working protocol (TCP/IP). Once that's taken care of, you can load up your TCP client software – your Web-browser, FTP or Telnet programs.

This of course is the bit that brings most people out in a cold sweat and has them fearfully mumbling about not knowing the right IP addresses. As we mentioned earlier TTCP was designed to be easy to use and all you need to do is contact an ISP, open an account ask them for their Name Server IP Address, connection phone number and to be safe their Network Mask. Once you have these few numbers you can set about installing TTCP.

The installation process is quite painless and you can get through the whole process with



IBrowse can handle all the fancy animations, backgrounds, animations and borders commonly found.



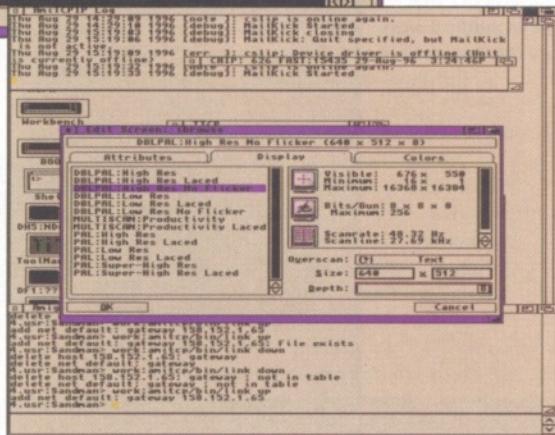
IBrowse has no trouble handling forms correctly making registration and searches relatively easy.

just your ISP's phone number and Name Server IP Address. Of course you'll also need your log in name and password, but even that's made as easy as possible. The program has a Record Log in option that automatically records the request from your ISP and your responses – once you've logged on once you do so again automatically.

Once you're setup you can save your preferences or even several if you have more than one account or ISP. We successfully logged onto both FirstNet and Demon with very little trouble at all.

Termite TCP also comes with a couple of other programs Termite FTP and Termite Telnet.

IBrowse can open its own screen using its MUI preferences – even a 24-bit Cybergfx one.



As you may have guessed from their names Termite FTP is used to access FTP sites and Termite Telnet is supplied to allow the access of Telnet enabled machines. FTP (short for File Transfer Protocol) is one of the oldest methods of transferring files from the Internet. Traditionally these programs were cli-based and a major pain to use.

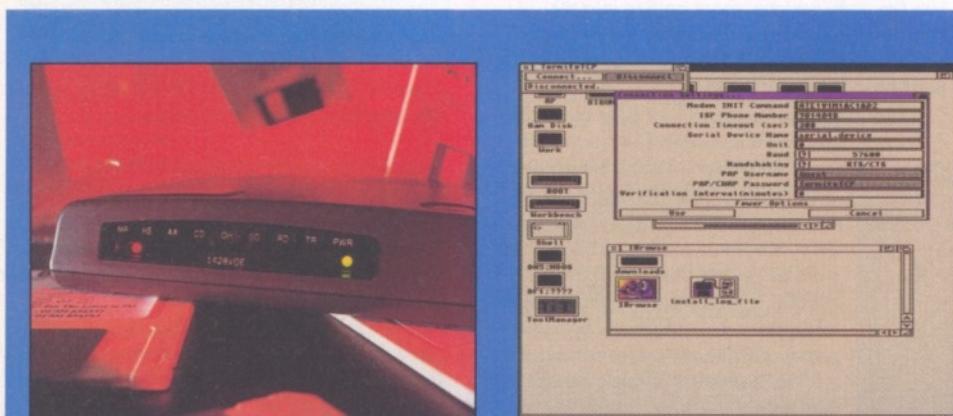
Termite TCP has a nice GUI front-end to make things easier, but there are several other PD and Shareware programs that do the same thing and most web-browsers can log onto FTP sites as well. The same goes for the Telnet software – it's nothing special either.

As far as alternatives to Termite TCP are concerned there is only one – AmiTCP. The main advantage of TTCP is that it has, and relies upon, PPP-support. Some ISP's will only support connections made through this variant of TCP and configuring the PD version of AmiTCP to support PPP is notoriously difficult.

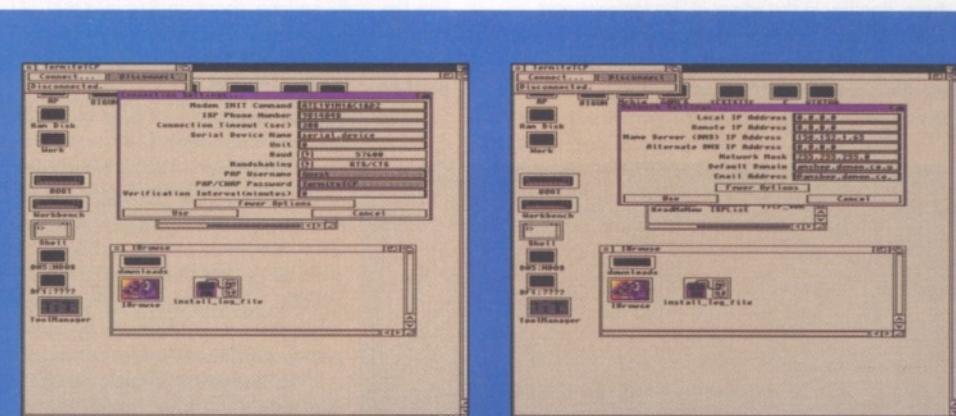
TTCP might not be viewed as something special by many experienced Amiga-surfers, but it is. It's a TCP package that anyone can use and that's something very special indeed. It would be easy to understand that some hardened Net-surfers might feel a mite resentful that Net-newbies might have an easier time of it than them. It's just a shame it didn't come out a few months ago – it would have saved this reviewer some major headaches.

Riding the Waves

The first thing most people do, once their Internet connection is established, is to try and jump onto the World Wide Web – not literally of course. To do this you'll need a web-browser. Like most computer platforms the Amiga has

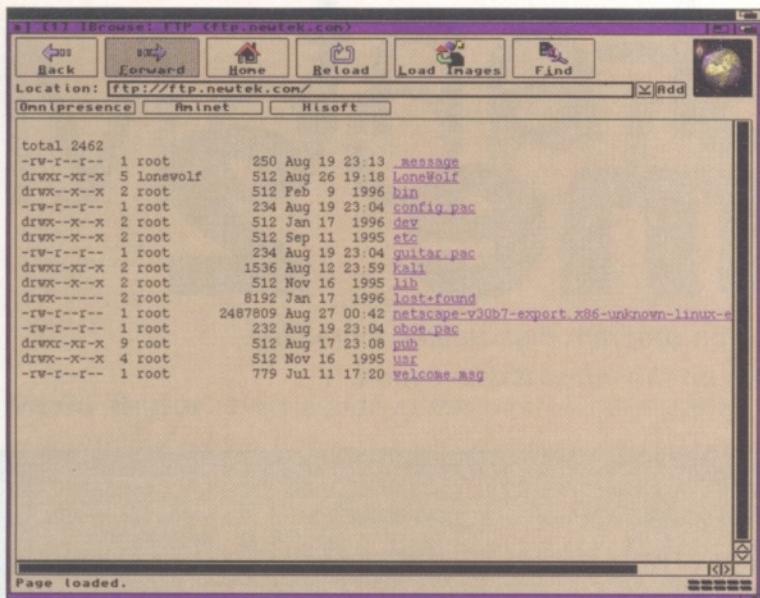


1 The first thing you need to do is get yourself an ISP (Internet Service Provider) – you won't get far without one. The same is true of a modem, a 28.8k model is best but you could probably get by with a 14.4k.

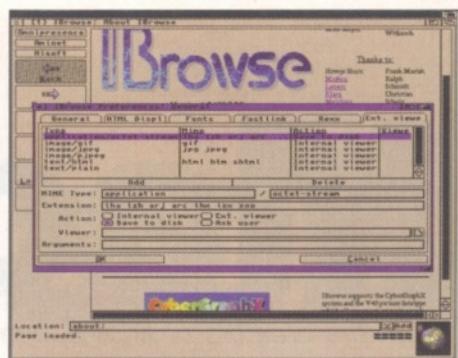


2 Next you need to configure the connection settings that Termite TCP is to use to connect to your ISP and communicate with your modem. If you have a fast machine (040 or 060) and a 28.8 you can get speeds up to 57,600.

3 Next you'll have to configure the network options. I know it all looks very confusing, but all you really need to know is the Name Server, IP Address of your ISP and their network mask (which is usually the default).



FTP maybe an old method of transferring files, but it is still useful and popular.



Configuring external viewers is a doddle and very similar to creating File Types in DOpus.

several PD browsers, but as yet IBrowse is the only commercial product for the Amiga.

The World Wide Web is by far the most exciting and rapidly expanding section of the Internet. Just months ago most of the Web consisted of pages with just text and images, nowadays you've got your fancy animations, borders, email links and forms. Browsers, like Netscape (on the PC and Mac) and Mosaic have had to keep pace with these changes. IBrowse has the advantage of knowing before hand how volatile the web can be and seems to have been designed with expansion in mind.

IBrowse is, because of its nature, the most resource-intensive of the two products. As with most other Amiga browsers, and a lot of other shareware programs nowadays, IBrowse relies on the excellent MUI system for its interface. This has the advantage of being both attractive and highly configurable.

Installing and configuring IBrowse is basically as straightforward as you want – you can just accept the default options or configure

almost every aspect of the program yourself.

The program takes advantage of another popular Shareware system, CyberGfx. This is definitely good news for owners of big-box machines with graphics cards as IBrowse can be opened up onto, and take full advantage of, any CyberGfx screen. This will enable them to view web pages in full true colour.

The interface of the program closely resembles that of AMosiac, but this is slightly misleading. IBrowse has a unique drag-and-drop system. Not only can you perform more "traditional" drag-and-drop functions such as dropping the user-definable quick access buttons on to the work area to activate them, you can actually re-structure the program's interface. If you click on certain gadgets you can drag and drop them on to specific zones and adjust the program to your liking.

Another useful feature is the program's FAB menus. These are essentially the same as the options that pop up in Netscape when you hold your mouse button down. You are given a

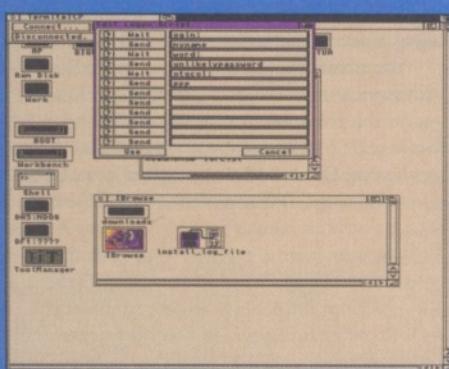
choice as to what action should be carried out on the selected file. Normal options include; open link, open link in new window, download link to disk, download as... and add link to hotlist. This may sound like a trivial option, but this can save you time that could have otherwise been spent menu-hunting and when you're online time certainly is money.

Like most Amiga browsers there is support for ARexx and external viewers. The difference between the external viewers in IBrowse and most others is that it is, like most of its configuration options, incredibly easy to configure. You simply need to select or enter a file type, a file extension, choose an action and select a viewer program.

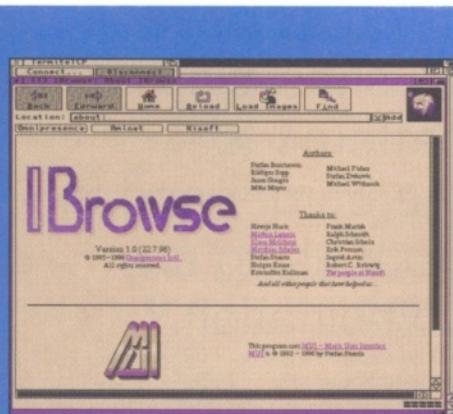
Is it worth it?

Well there you have it, the Amiga's first commercial web-browser – impressive stuff, eh? However there is even more to the program, such as limited email support, easy Gopher searching, a cache editor and correct handling of forms. However the most important feature of the program is that it will be able to keep up with changes in the WWW. IBrowse already has support for a number of Netscape extensions and future extensions will be available for download from both the Omnipresence and HiSoft sites.

The only things that are really missing from this package are a news-reader and dedicated email program. However, these will be available shortly as an option. While it's certainly advisable for users of other browsers to upgrade to IBrowse, there is not much of a reason for existing Net-users to switch over to TTCP. However one thing is definite, if there is anyone still out there who has still not enjoyed the benefits of Internet-connectivity then this is the way to do it. ■



4 Right now we're ready to go, we just need a log in script to save logging in manually every time. You can use Termite TCP's built-in recorder – just select record log-in script, log-in and a script will be saved.



5 Finally you can go on-line by pressing the connect button. Once the connection is made, you can start-up your TCP client software such as a FTP, Telnet, email or web-browsing program. Now was that so difficult?

Net & Web

Price: Net & Web (including IBrowse) £39.95
Net & Web Pro (including IBrowse, Termite TCP and email) £89.95

IBrowse £29.95

Termite TCP £59.95

Supplier: HiSoft

Contact: 0500 223 660

Verdict: 85%

Font Machine 2

From the creators of X-DVE, comes a new companion program that creates incredible fonts at the click of a button. **David Taylor** reports on the latest Italian export.

Font Machine is a new program that can create colour fonts using texture, patterns and plasma effects. Try it out for yourself with the demo which has been on our Subscribers disk and Amiga Format's Coverdisk. The basic idea is very simple - you load a bitmap font into the program and then make whatever changes you want to transform it into a colour font.

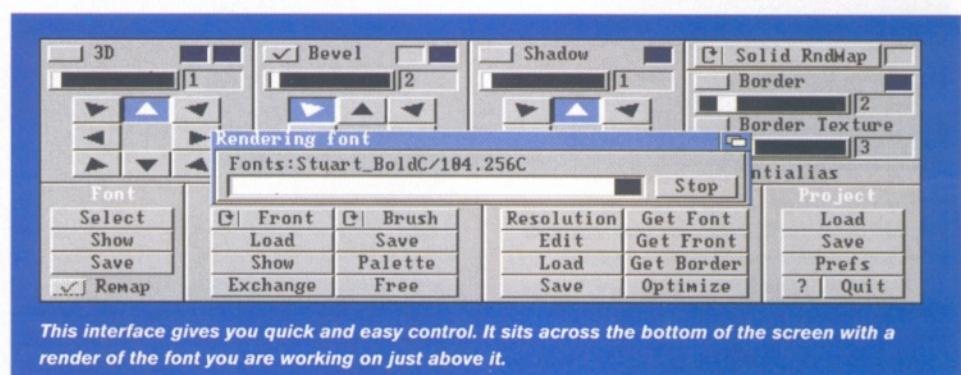
Before you work on the textures that add all the flash effects and colour, you can choose whether you are going to add a 3D, bevel or shadow effect to the font. These are easy to add - just choose the number of pixels you want and the direction you want it put in. Then simply select the arrow for the direction, choose the size of it and apply it. These effects are perfectly adequate but after you've applied the colour effects you might decide that they are not worth overdoing. They are worth putting on - but only in moderation.

Colour creations

The real meat of the program lies in its ability to quickly transform a normal, bland bitmap font into a colourful and unique font. Simply select the font you want to use - bearing in mind that in order for you to be able to see any amount of a texture it needs to be large - around 100 point size. From this you can guess that these fonts are not intended for general use, but for use in titling and animation, which is what makes it the ideal companion to X-DVE.

When the font is selected, you simply choose which part of the font you want to apply the texture to and what sort of texture you want to add. You can choose between adding the texture to the front of the text or to the border. The textures themselves can be a brush - which is any picture (though keep it small or you won't see any of it), plasma or a pattern. To add a brush texture you simply load it in. When a brush is placed on as a texture, it's as if the actual letters are transparent, but anything round it isn't so you can see the appropriate part of the picture through the letter. The plasma and patterns are also applied by clicking on load, defining the type to be generated and then clicking on OK.

It is important to set the correct resolution for the font, including an appropriate number of colours, or else the textures will look terrible. You can grab the palette from the texture so that it retains the exact look of the original, although



Three examples of fonts knocked out by Font Machine in a matter of minutes.

"Add separate brushes, plasmas or patterns to the border and the front using any combination."

it has the usual limitations of 256 colours.

You aren't limited to adding just one effect to the font. You can add separate brushes, plasmas or patterns to the border and the front, using any combination you like. When you choose to do this, you need to get a palette that can deal with the two separate elements and a custom one can be generated using the Optimise feature.

Output

When you have achieved the effect that you are happy with you can render the entire font (or parts of it) and save it out in the Colourfont format. In addition, you can save the project preferences so that you can easily add the same effects to a different font. This allows you to create a family of similar looking fonts from different sources.

The format of the font is where the program falls down a little as many programs don't seem to use it. The new version of X-DVE works a treat, but it doesn't seem to work in Final Writer; this is one format that is restricted to DTV and animators.

Some of the more powerful paint packages can use the fonts, like Personal Paint (is there a format it won't use?) and the brand new Art Effect. With these programs you just have to load them in as normal and then type away using them on pictures.

You could then save these out as pictures with the correct coloured backdrop and then import the picture into your word processor, but that is a bit of a roundabout way to have to use a program. Given it is an accepted format, I am surprised that DTP programs spurn it. Perhaps it is to do with its bitmap format.

If you do have a program that uses these colour fonts, then this program is wonderful. The quality of the fonts is excellent and my X-DVE animations now take on new dimensions. Unfortunately, if you don't own the right software there's just no point. ■

Font Machine 2

Price: c.£50

Supplier: ClassX

Contact: 00 39 587 749206

Verdict: 85%

Modem Pack

David Taylor takes a look at the new modem pack from Online which comes at a surprisingly low price and with a complete set of software.

Some time back OnLine PD released a modem complete with a full Internet pack using all the Comms software you'll need. They have now updated the pack - it's a staggering 31 disks and includes a new modem.

There are two modems on offer, both small and compact in size and with a beige casing similar to the Amiga's. The first is a V34 V. Fast 28,800 data including Group 3 14,400 fax capabilities and the other a V32Bis 14,400 data with similar fax capabilities. What does all that mean? Well the first numbers are baud rates and at present the fastest connection available is 57,600 so as you can see these modems are half that speed. Don't let that deter you though because 57,600 modem are not that much faster and you will often find that the quality of the phone line is not sufficient to allow top rate transfer. This speed modem is very acceptable and should serve most people well, while being fast enough to ensure that you don't generate too high a phone bill.

Setting it up

Installing the hardware is no trouble at all. The modems come with phone splitters so that you can have both a phone and your modem installed on the same line. Then the modem needs connecting to the serial port and the power and that's it. The serial connector comes with a split end so you can connect it to the standard Amiga port or the PC style connector that is on the new Surf Squirrel.

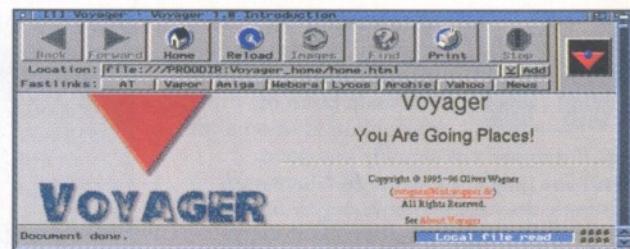
Once this is done you need to decide which software you want to install from the pack. As a lot of Internet software uses MUI, you are best off starting by installing the

latest version of the MUI package which is included. To do this you need to be able to manually de-archive an Lha archive or know how to do so in the likes of GUI-Arc or DOpus. It's not hard but pay note that you need some knowledge of the Amiga to set up the software and that really goes for all work with the Internet: the WWW software can be tricky to configure and you need patience and understanding. You could be lucky and have all the information that you need in which case the programs may set up without a problem.

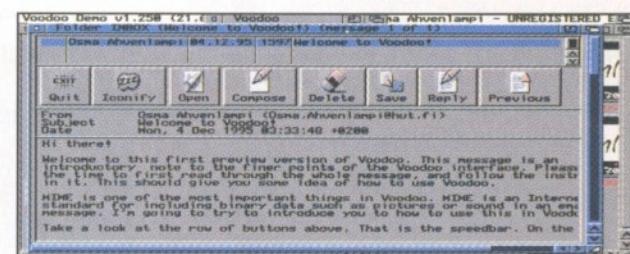
Choosing software

When MUI is installed you need to decide what software best suits your needs. If you are going to be using a CLI Internet account like CIX or aren't going to use the modem for the Internet but just for BBSs or private file transfer then you don't really need to install anything other than JRComm (and that means you don't need MUI). However, most people buying a modem nowadays want much more than that and want to be able to send email, surf the Web, download software from the FTP sites around the world. Inter Relay Chat and Newsgroups are also very popular and software for this is also included.

For the WWW you have the choice of Mosaic - the old favourite, Voyager and AWeb (which doesn't require MUI). Voyager is a very nice interface, but despite this none of the Amiga's browsers can match the current ones being developed on the PC by Microsoft and Netscape. This does mean that although you can browse the WWW and access all the pages, there may



Voyager is a WWW browser which looks very good, but can it really compete with the likes of Navigator?



Voodoo gives you an excellent interface for email..

be parts that your browser can't deal with as there isn't support for the likes of virtual reality plug-ins.

FTP is dealt with by a simple to understand FTP GUI called AmiFTP and mail can be sorted and dealt with by the excellent Voodoo. Voodoo gives you a graphical interface to the email which allows you to read and compose new emails easily. You can reply to mails and attach files for transfer. The last bit is very useful as you can use it to include binary which it will transfer by encoding it into ASCII so that the recipient can decode it. It also means that should you receive a mail with a file attachment you can decode it automatically without the need to swap to a uudecoder and do it manually.

There are many more programs included as you would expect from a 31 disk set, but we don't have room to cover them all. However, it is safe to say that they have every aspect covered - don't forget that they are all some form of PD and some may require separate registration fees to be paid in order to unlock all their functions. The disk set is available separately for £21.75. ■



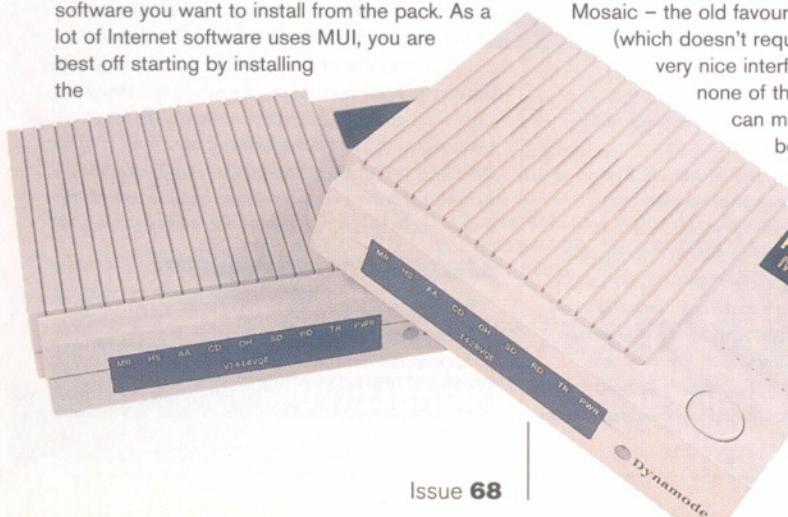
Modem Pack

Price: V34 £149.99/V32Bis £89.99

Supplier: OnLine PD

Contact: 01704 834335

Verdict: 95%



DataChrome Gold

The innovative program that takes datatype integration to new limits is back and its features have been seriously upgraded. **David Taylor** investigates.

When DataChrome was released last year it received mixed reviews. The main bone of contention is whether or not datatypes are actually any good. Because they are created by Shareware authors, they have a tendency to be unstable but the current versions seem very stable to me and the most common, JPEG and GIF, are fine.

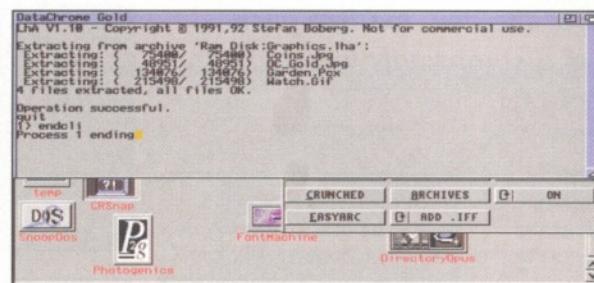
DataChrome Gold allows you to make use of datatypes in any program. Not all programs, even new ones, include datatype support. DataChrome changes this and patches them so that you can use both picture and sound datatypes to load alien files.

Before using the program you need to install any datatypes that you don't have on your system: they are included with the package. You then need to install the package which includes the program, a help file and a couple of CLI utilities. When it's loaded you'll see a simple interface with a set of preferences. There are plenty of new options including internal JPEG handling which will load and save files out as JPEGs – you choose the quality for all saves directly in this interface. With this activated, you can save files out directly from the likes of DPaint and they will be converted and saved as JPEGs with the extension changed automatically. It is a pity that you can only change the JPEG settings by going back to this interface, but it would be a lot more difficult, I suspect, for the programmer to patch into all programs to allow you to interact with DataChrome through the other programs.

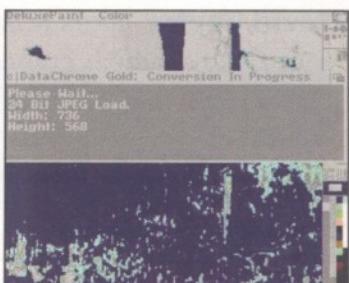
Catch me

Before any program will take any notice of DataChrome you must select the program and add it to the Catchlist. This list can be saved but you can only insert active programs which means that you need to load a program before you can add it to the list. This list ensures that incompatible or unsuitable programs don't use DataChrome but it can't go any further than choosing the program. This means any operation will be subject to using DataChrome. For instance, using DataChrome with DOpus 4 means you can view GIF images but DataChrome will also insist on de-coding the files when you do a simple directory listing even if you have no intention of viewing the files.

You can turn off DataChrome using the interface but it is still irritating. Other new



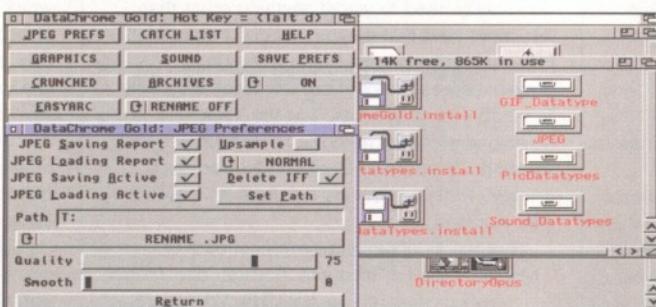
The program seems to hang when de-archiving automatically and even asking it to close the CLI didn't work.



Load new file types into DPaint but it won't work if the source file is 24-bit.



This is a picture converted effortlessly using DataChrome – so it does have its uses.



The interface allows you to choose all the options including internal auto-JPEG handling.

features include packing and archiving. They allow the loading of powerpacked files into programs that don't normally accept them and allow you to unpack archives simply by copying them – both lha and lzx are supported, so long as you have the archivers installed. Unfortunately I only had limited success with these features. The Powerpack didn't work with the one text editor and the EasyArc option didn't appear to function at all. The de-archiving seemed to work,

but hung at the end of the operation instead of closing its shell. In effect, the files were de-archived but at the expense of freezing my file managers – this happened with both DOpus 4 and InfoNexus 2.

Other features

There are other restrictions but these tend to be imposed by the programs themselves rather than DataChrome. The program works by decoding the file and storing it in a temporary drawer; it then supplies the decoded version in place of the requested file. However, DOpus 4, for example, will now de-code JPEGs but can't display the IFF that it would use invisibly in place of the JPEG because it's a 24-bit file and they aren't supported by DOpus 4. As many new programs support more filetypes the only need for DataChrome is with older software – but remember that datatypes require Workbench 3 – a Catch 22.

Also supplied is a utility called DataConvert which will use datatypes to convert files. There is a small PD CLI command that will change any datatype supported file to an IFF file too.

This is a frustrating release. The program does genuinely extend the OS capabilities and makes the system more accessible and seamless. Datatypes do take time to de-code but so do programs that have built-in loaders. But while the program could make life a lot easier – especially for beginners, the bugs need fixing and the interface could do with sprucing up. It's good for the reasons I've mentioned but it caused too many crashes and costs far too much money. ■

DataChrome Gold

Price: £49.99

Supplier: Chroma

Contact: 01328 862693

Verdict: 70%

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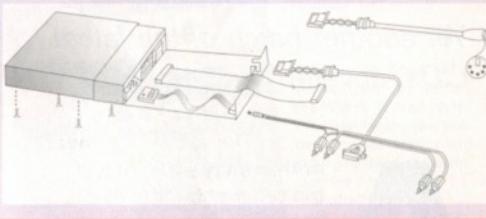


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CD check out

Yet another batch of the latest CDs, covered by **Ben Vost**.

Another mixed bag this month. A selection of programs to help you avoid trouble with your Amiga, a competitor to Studio and TurboPrint and the latest Aminet collection.

Amiga Repair Kit

I guess Stefan Ossowski is trying to get us used to the fact that CDs don't have to contain 650Mbs of material. Last month we looked at the Amiga Developers' CD, with only 58Mb of programs, data and documentation on it, and this month we have the Amiga Repair Kit, a CD that could never be described as being full – it only has 35Mb of files on it (and a lot of those are translations for documentation). But it's quality, not quantity, as we have to remember, and getting DiskSalv 4 (and, a bit bizarrely, DiskSalv 3 and 2), RDB-Salv and a couple of the modules from UpperDisk Tools for just £5 has to be good value for money. And, of course, having these tools on a CD means that you won't have to worry about read/write errors like you would with floppies and if you are one of those people that keeps their repair tools on your hard drive only to go "Doh!" when your machine fails and you can't find the original disks, then this will also be a boon (as long as you have Kickstart 3.1 and can get a CD to work from a standard Workbench disk, otherwise you'll still have to mess around to access the tools you'll need to restore your hard drive). "Just in case" is always a lot better than "Oh, I wish I'd".

Amiga Repair Kit

Price: £5

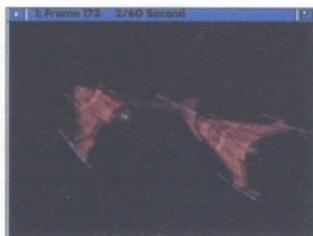
Supplier: Epic Marketing

Contact: 01793 514188

Verdict: 80%

Print Studio Pro

Another competitor to Studio and TurboPrint, this has the definite bonus of coming on a CD with loads of clipart to show it off to its best advantage, but before we get onto the three programs included I just want to say a few words about the clip art provided. Firstly, the colour clip art is a mish mash of images that



Another great piece of software free on the Aminet CD.

aren't sorted in any way. OK you have PictureCat to get around that problem, but that doesn't absolve the author of the responsibility of checking the suitability and legality of the images used. Some are copyrighted material, including shots from the Bloom County strip and pictures of Mickey Mouse and the usual selection of Boris Vallejo, Chris Achilleos, etc., and others will just never get used like the example shown – the interface from a molecular modelling package for Windows! Right, well, I've got that off my chest now – onto the programs.

PictureCat is a nice image cataloguer that can be used as a slideshow program in its own right with a variety of wipe effects to spruce it up. You can categorise images so you can quickly find something on a particular topic and it will give you information if you double click on the name, or display them if you double click on the thumbnail itself.

PrintStudioPro is a WYSIWYG print program which comes with templates for video labels, disk labels and a couple of others, but in German, so they're a bit hard to decipher. It doesn't have templates for any of the common printer label formats like Avery labels, nor for things like PaperDirect's range of paper products, but it allows you to put pictures, text and simple vector graphics on a "page" and move them around to your heart's content. Your preferences can be demoed on screen which saves you wasting paper and ink trying to get the program set up correctly.

Printer24 is a cut-down version of the above program, both of which allow for true 24-bit output to your printer, bypassing the Workbench preferences drivers. All three programs use a strange GUI program, quite unlike MUI. I could find no documentation or libraries to inform me what system was being used, but I didn't like it very much.

Print Studio Pro

Price: £TBA

Supplier: Epic Marketing

Contact: 01793 514188

Verdict: 75%

Aminet 13

It seems only days since the last Aminet CD came out, and there hasn't really been the time to come up with new synonyms for excellence, so I guess we'll just have to go with the tired old cliches.

On this CD you'll find the truly brilliant MainActor 1.55 in a registered version. MainActor, for those that don't know, is an animation compiler. Big deal you say, I can do that in DPaint. Ah yes, I say, but you can't have a constantly changing palette (well, not without your animation looking like poo), you can't create 24-bit animations for graphics cards and you certainly can't add sound to your anims, control the rate at which each frame gets displayed or load in animation formats from other platforms. Can you, eh? An ARexx port makes MainActor doubly useful as it can then communicate to your image processing package in order to dither down images that are too colourful to display on your machine and so on.

So there you have it. There really isn't much else to say about the CD, other than it is absolutely chock-a with all the new stuff from Aminet up until 10th July 1996. Well, that's not entirely true, there is a new animation index that gives extra details like the screendepth, animation size and number of frames and the thumbnail viewer PicZoo now handles non-standard screen modes a bit better. Another winner from Urban Muller... ■

Aminet 13

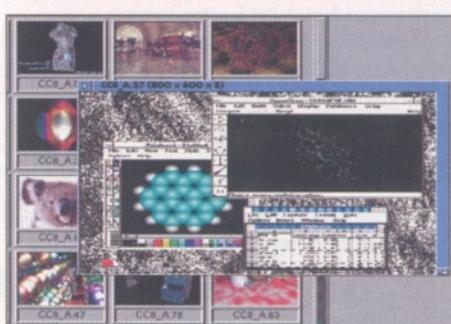


Price: £12.99

Supplier: Epic Marketing

Contact: 01793 514188

Verdict: 92%



Print Studio Pro: What's the point of this picture?

Mail order

AMOS Pro Compiler 2



Speed up your AMOS programming with the AMOS Pro Compiler 2 from Europress, which FI Licenceware have re-released for a limited period. If you want to know more about the program, we ran a review of it in the April 1996 issue, where we gave it a respectable 87 per cent.

Description	AMOS Pro Compiler 2
AS price	£14.99
Order code	AS/AM/1
Special subscribers price	£13.99

Mini Office

A collection of database, spreadsheet, graphics and word processor programs from Europress that you shouldn't be without. It can be especially useful if you are planning to set up a small business.



Description	Mini Office
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Issue 67

The Internet is still the buzzword of the nineties. We bring you the complete guide to the WWW, Amiga style. What software can you use on your Amiga and who provides the best service for Amiga owners? Plus, top reviews of X-DVE 2.5 and the usual tutorials, including AMOS and CanDo.



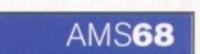
Issue 66

Software for free? We found out just what you can achieve with the free and nearly free software available from the Aminet archive and from PD Houses. This comprehensive feature shows you how you can get the most out of your Amiga even if you are on a very tight budget. Why pay more?



Issue 65

The Amiga is the ultimate multimedia machine but do you know how to get the most out of it? Graeme Sandiford has all the information you need in our extensive feature. Reviews of the Surf Squirrel, Photogenics 2 and XiPaint 4 as well as all the usual tutorials and regulars. Don't miss out on this



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- CD32, SX-1 expansion card, revised version year old, black keyboard, some CDs, fully AGA compatible, may sell separately. All original boxes, manuals, etc. £180. Phone Ian (Milton Keynes) **01908 225532.**

- Over 25 PC cover CD-ROM discs from a selection of different PC magazines. £15. Call Matthew on **0181 523 8058.**

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- Amiga CD³², only £75. Call Michael on **0976 693708** (mobile), or **01274 565205** (office hours).

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- GVP 1230 accelerator for A1200 with 40MHz FPU, 8Mb Fast RAM, £160: Imagine 3 and manual, £30. SAS C, version 6 includes all manuals, £50. Call Dave on **01394 420731**, evenings only.

- Squirrel SCSI interface, £45. Goldstar CD-ROM drive, £60, Seagate 80Mb 2.5-inch IDE hard drive, £75, 4Mb A1200 RAM upgrade, £80. Phone **01273 493659** (Sussex).

- A1200, 28MHz 68030 FPU and MMU, 6Mb RAM, 405Mb HD, Power hand scanner, colour dot matrix printer, external floppy drive, £550. Call Richard **01476 565980.** No offers. No split. ■

Amiga answers

Missing C Functions

 I'm just starting to learn C and in some of the doc files I've been reading I see references to many functions that have underscores in front of their names. Yet when I try to use them my code doesn't even compile properly so does this mean the functions don't exist on my system?

Steve Jones
Bristol

You haven't actually said what you've been reading but, since you are presumably getting linker errors because the function names are not being found, I suspect that this is connected with the fact that the docs are meant for both C and assembler programmers and you are not using the real C function names.

In general, functions will have more than one entry point and, underneath the surface, the underscore is just the C compiler's way of

indicating that the associated function is going to get its parameters on the stack. It's not just library routines that this affects – when you place a call to a routine, say `SomeFunction()`, into your C source the compiler generates a reference to the routine that has an initial underscore tagged onto the function name. The call to the function `SomeFunction()` generates the label `_SomeFunction` which will be a short routine that pulls the function parameters from the stack and places them into correct 680x0 registers before making the real function call.

From C however you should never have to worry about these name changing games because it all happens transparently. Having said that, you will occasionally come across the odd routine that really does have an underscore in its name, Dice C's alternative `_main()` function for example. Look at the C prototype for the function and just use the name specified there!

Paul

A Non-existent Utility

 Someone has told me about a program called Melody which apparently is able to create Amiga guide files. I've tried five public domain libraries now and no one has heard of it. Is it really a PD package and if not, who else can supply it?

Chris Birch
Braintree
Essex

The reason you're not having much luck is that you've been given the wrong program name – it's not Melody but Heddley. The program is Shareware and was written by a chap called Edmond Dumbill. He's made a good job of it too – the program can directly incorporate text documents into an AmigaGuide database file description letting you create link buttons, set text styles and colours and, in short, produce an AmigaGuide readable file from the sections

The experts at hand to help you...



Whenever you try out something different with your Amiga, or buy a new piece of kit, you might come

across problems that you don't know how to solve. That's what these pages are here for – to guide you through your difficulties and get you using and enjoying your machine to the full. We've got a great group of experts to hand with their own in-depth knowledge in special Amiga areas. So put them to the test, and send your queries in.



Paul Overaa is our Operating Systems programming expert. He has written several books, including: Mastering Amiga Assembler, Mastering Amiga ARexx and Mastering Amiga C. When he's not drinking red wine or wind surfing, Paul can be found making music and designing programs on his Amiga.



Gary Whiteley is our expert on video and graphics. He regularly produces work for films and TV. Gary has also written several books on his favourite subjects – among them is Amiga Desktop Video, published by Future Publishing (call 01225 822511 to order a copy). Gary also regularly reviews new products for Amiga Shopper.



John Kennedy is our hardware and music expert. He has written Supertests and features alike for Amiga Shopper in the past. He also writes features and tutorials on a range of subjects for our sister magazine Amiga Format. This month in Amiga Shopper John continues with his tutorial on CanDo.



Larry Hickmott is our DTP and word processing expert. He produces his own DTP magazine called Em and has written several books, including The Wordworth Companion for Digita. This month Larry has written our cover feature about how to get the most out of your Amiga in the world of Desk Top Publishing.

Answers contents

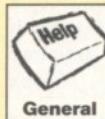
If you're looking for a particular problem, this handy index will help you find the answers you need:

C Functions	33
Music utility	33/34
LVO Values	34
Programming	34
Encoding/Decoding	34
ARexx	34
Gadtool Gadgets	34
Graphics	34/35
AmiCDFS	35
CD-ROM Drives	35
DTP	35

of text that you have loaded from ordinary ASCII files. I think if you try those original PD sources with the right name they'll almost certainly have a copy.

Paul

LVO Values



My question couldn't be shorter so hopefully you'll find space to put me out of my misery. I've read about things called LVO values which are apparently library vector offsets – but what on earth does this actually mean and what do they do? I don't need a technical explanation because I am not a programmer but I'd sure appreciate a rough idea of what it all means!

Pete Simpson
Charlbury
Oxon

Library vector offsets are connected with the way that Amiga libraries are accessed once they have been loaded into memory. The libraries are set up with a table that holds the addresses of the various library functions, although they are not conventional memory addresses as such though – each table entry is actually in the form of a low-level machine instruction which cause the Amiga to jump to the appropriate routine whenever microprocessor control passes to a particular table entry. Programmers call these systems 'jump tables' and the LVO offsets that you have read about simply represent the displacements needed to reach into these tables and thereby allow jumps to the real library routines to be made. It's a good flexible system and there's no doubt that much of the Amiga's power and expandability is a direct result of these library arrangements.

Paul

A Lack Of Assembler?



If programming the 680x0 directly is such an efficient way of coding on the Amiga, and used by the experts, why is that your magazine amongst others places so much emphasis on languages like C and Basic.

D. Faucheu
Spain

There are two reasons: Firstly, it's because high-level languages like Basic and C are easier to learn and use. Secondly, all the official Amiga manuals assume that the reader is C literate which of course is an important reason for all Amiga programmers to know at least something about C.

We do occasionally provide assembly language help and it is a fact that almost all serious programmers do eventually get around to learning about assembler. Normally however this is not in order to give up working with high-level languages completely. Such programmers usually only write parts of their applications in assembler to gain extra speed in important sections. The real benefit of knowing how microprocessors are driven is that you gain an understanding of what computing is all about at the 'nuts & bolts' level. A lot of things that frequently don't make sense to programmers working solely with high-level languages, then suddenly fall into place.

I have wondered whether a little more 680x0 coding, or perhaps some mixed language stuff where you get the best of both worlds, would be useful at times and, since the content of the mag is pretty much guided by what the majority of readers want, chances are that if we get many more letters about this area something will be arranged in the not-too-far off future.

Paul

Uuencode



Where can I get details about how to write a program that can encode/decode files for transmission on the Internet using the uuencode method.

John Stirling
Leytonstone

Presumably there's an Internet RFC document on this method somewhere although I've not seen it. If you hunt around your nearest AmiNet mirror site however you'll find a number of uuencode based programs many of which will include source code that is bound to help. The version I use incidentally is by Ralph Seichter and was downloaded from Compuserve's Amiga User forum libraries.

Paul

Running ARexx Scripts From Workbench

How can I make an ARexx script run directly from the Workbench by double clicking on the icon my word-processor creates. I'm sure it's easy enough to do but, having tried a few possibilities, I still can't seem to get it to work!

Jan Kynicos
Belgium

It's easy. Select the icon and then choose Information from the Workbench Icon menu. Remove any default tool name that may have been put there by your word-processor and insert this line...

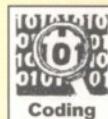
sys:rexxc/rx

Once you've clicked on the 'Save' button your

script will run automatically when you double click the icon.

Paul

Gadtool Gadgets



I've been trying to create some slider kind Gadtool gadgets but although they appear properly on the screen they refuse to send any messages when the sliders are used. I've enclosed all the relevant source code and I'm sure that I am setting my gadget message flags correctly. Trouble is I don't really know what else to try so any help would be greatly appreciated.

Eric Boyd
Mersyside

Listing One

```
g_previous_gadget_p=CreateGadget(SLIDE
R_KIND,g_previous_gadget_p,
&newgadget,
GTSL_Min,-12,
GTSL_Max,+12,
TAG_END);
```

● Eric Boyd's original gadtools code

The code's fine except for one small slip in the area that I've reproduced in Listing One. You need to add GA_RelVerify tags to your CreateGadget() function calls. If you modify your code as shown in Listing Two, I'm sure that everything will then start working properly.

Paul

Listing Two

```
g_previous_gadget_p=CreateGadget(SLIDE
R_KIND,g_previous_gadget_p,
&newgadget,
GA_RelVerify,TRUE,
GTSL_Min,-12,
GTSL_Max,+12,
TAG_END);
```

● The addition of a GA_RelVerify tag is all that's required to fix the code shown in listing 1.

Graphical solution?



In issue 66, page 34 David answers a short letter from D Jones of Wakefield. His problem concerns converting images on his bog standard Amiga. Providing that Mr Jones has a HD then there is a program called GFXCON v1.6, this converts all types of images and on a 2Mb system you can specify which directory you can use as virtual memory for conversion. I successfully converted an absolutely huge image when my setup was a basic one.

GFXCON v1.6 does not need a MMU for the virtual memory to run. It's only draw back is that when it has to use the virtual memory obviously there is a speed reduction. I run a PD library "PD WORLD", and if you want a copy of the program then I can send it to you, but please can you either give me a contact address

for Mr D Jones or could you pass this information onto him. I hate seeing an Amiga in trouble when it could be sorted so simply.

A little suggestion for your mag, it is unfortunate that it has to become so thin. Could you not run some tutorials on some of the better PD programs such as Term, GFXCON, Filemaster, Edward Pro, Menus & More and Timemeter. Some of these programs are in everyday use like Tools Daemon. I am always helping out people who are having problems with these kind of programs.

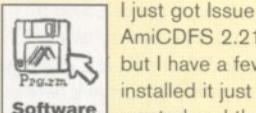
Anyway I've probably wasted enough of your time so I hope you can help the Gent.

Tony Seymour
PD WORLD

Thanks for taking the trouble to send in the solution. I thought there might be such a program, but couldn't find it or its name. Unfortunately, if memory serves, Mr Jones doesn't have a hard drive. Would it be possible to use a spare floppy as a virtual device? I know that it wouldn't give that much additional room and that the speed would be diabolical, but it might be the only solution.

Dave

CD trouble



I just got Issue 66 of AS with AmiCDFS 2.21 on the Coverdisk, but I have a few problems with it. I installed it just as the document wanted and then rebooted and tried a CDDA disc but the icon that appeared showed a non-DOS disc. So I had to start a CD player separately and it worked nicely. Then I tried "Insight Dinosaurs" from Optonica. The icon for the CD was normal but the name of the CD was changed. Instead of "Dinosaurs" it was now called "Dinosaurs 6 CDTV" and the program wouldn't run because that name is illegal.

So I had to go back to the original CD filesystem. Is it just me or my configuration? Or is there a bug? It got really weird when I renamed the CDO file in Devs:DOSDrivers to CDO.BAD and put the old one back as CDO. I rebooted and now both filesystems seemed to be installed and CDO displayed the correct name and CDO.BAD displayed the other one. It does not matter what I call the AmiCDFS mountlist. If I put a CDDA disc in, it appears and works normally but only as long as both mount files are in the drawer.

Terje Karlsen
Norway

Well, if you have a correctly set mountlist and icon in the Dev:DOSDrivers drawer, it will automatically be loaded no matter what you have named it. To stop the CDO.Bad appearing, you need to remove it from the drawer. It could be a bug brought about by your system, although I've not had any problems nor heard of any. The incorrect name of the disc is very odd, because as you know CDs are read only so the filesystem can only get the name of the disc from the CD - it cannot change the name on the CD. This does seem to point to an error in the program or a clash with some other mountlist on your machine possibly.

I would suggest trying to load your CD from a clean Workbench floppy. Install AmiCDFS onto that new floppy with any software that is needed for your system (such as SCSI Mounter). Then see if it works with that system. Alternatively have a go with SnoopDOS by removing everything from your automatic startup (DOSDrivers, WBStartup, User-Startup) and starting them all one at a time. Try AmiCDFS first and see if it works and if so then work through the rest to find out what is causing the problem. You may find it that way, although it's not guaranteed.

Dave

IDE CD-ROMs?



Just wondering if it is possible to connect an IDE CD-ROM drive to my IDE port as well as my hard drive? Do I need anything other than an extension lead or would it be as well to go for a SCSI drive?

Alex Hughes
Cardiff

The answer to this is yes and no. Technically it appears that you could connect two IDE devices, although doing it yourself is not advisable. We have heard that somebody may be releasing a CD drive that does exactly this, but we don't have details as yet. There is a new CD drive that attaches to the IDE slot with a through port for the hard drive. This device though is basically the DataFlyer SCSI adapter and the CD is SCSI. The plus side of this is that you get a SCSI adapter thrown in for free.

Dave

To PC or not to PC



I am getting more and more interested in desktop publishing and was wondering if it would not be better getting a PC instead of using my Amiga. I don't want to give up the Amiga, but there doesn't seem to be much happening with it these days and I don't know if it is worth spending more money on the Amiga when it may not have a future. Could you tell me what you use for publishing and why?

Jeff "frustrated" Whalley,
Harrogate

I wouldn't worry about giving up the Amiga because you are not alone. However, don't go rushing out to get a PC without considering all the facts about what you intend doing in publishing. After all, if it ain't broke, don't fix it (or words to that effect).

If your Amiga can produce what you need, then why get a PC? There has to be a reason for moving platforms, and many Amiga owners do it simply because they're fed up and want a change of scene.

At LH Publishing, we have four Amigas, one (and a bit) PCs and a Macintosh. All the Amigas are used for writing and publishing. The PC is used for accounts and networking while the Macintosh is used for DTP on the odd occasion we are forced to use it.

Which leads me to why we are forced to use a specific platform from time to time. The other day, I was creating an advert for a

magazine and asked the advertising department, what format they wanted the copy in. I was told QuarkXPress. I asked if I could use PageMaker 6 (a new toy I had just bought), but was told it had to be QuarkXPress because that was the program the bureau used.

So even on the Macintosh, I couldn't choose to use such and such a program because at the end of the day, for a lot of DTP, the program used is dictated by the program/s your printer or bureau use.

It isn't so much that these programs on the PC or Macintosh are so much better than the equivalents on the Amiga, because there are many swings and roundabouts with all of them. I can name half a dozen features for example, that Professional Page has that PageMaker 6 does not.

At the end of the day, what you use depends on what you need the program to do for you and how well you can use a program. Having used Professional Page for six years or more, I feel a lot more comfortable with it than QuarkXPress or PageMaker on the PC or Macintosh which is why most of my own DTP is still done on the Amiga.

If your applications don't do something you need them to do, then you may need to look elsewhere. Just remember before rushing off to buy a Macintosh, that one of the new Amigas from PIOS is going to be Macintosh-based and that means you may well have the best of both worlds.

For those who are considering PCs, don't get rid of the Amiga, twin the two together using the Siamese System and you'll end up with a super-computer to be really proud of! If you want a definitive guide to how to get the best out of your Amiga as far as DTP is concerned then turn to our feature on page 15.

Larry

More Chips, Please



I have an A1200 with a Blizzard IV Turbo 68030 CPU and 8Mb of 70ns Fast RAM. I have no jumpers set. How can I reconfigure the memory so I have more Chip RAM available? I have SimCity 2000 which runs very slowly and tends to crash. Please give details on ways to speed up the Blizzard.

Mike Whyvell,
Wheatley, Doncaster

The amount of Chip RAM in an A1200 will always be limited to 2Mb, and this limit is imposed by the design of the custom chips. You cannot increase this amount, no matter what you do. The operating system will dive in and take some of this memory as well, and the screen display will also take up space.

However, what you can do is maximise the amount available. First of all, if you boot Workbench make sure no unnecessary programs are launched in the background (screen blankers and so on). Also, keep to small screen display settings: if your monitor or TV can cope with NTSC modes, then use them. Keep the colours to a minimum.

Will having more Chip RAM available speed up SimCity? Sadly, it probably won't.

SimCity is notorious for running amazingly slowly and even a 68040 doesn't help much.

Speeding up your Blizzard board further isn't easy, as you already have suitable RAM (70ns). One thing you can try is shadowing the system ROM, a feature which some accelerator cards will perform at boot time. This copies the ROM into RAM (and so takes up 1Mb of Fast RAM) but provides a slight speed increase – simply because reading from RAM is slightly faster than reading from ROM.

John

Infernal racket



Can you please tell me how to stop the noise of my hard drive when it is turned on as it makes a whining noise all the time? Also, how can I stop the disk drives from clicking when not in use?

How do I save programs onto my hard drive if they don't have installers? I have managed to save KindWords to the drive, but it keeps asking for the floppies although if I cancel the requester it does carry on. How do I stop the computer asking for disks when the contents are on the drive? All I did was copy the contents into a new drawer.

K Srgt
Middlesbrough

Well, you can't really stop the hard drive from whining as that is the noise it makes when it is spinning. It shouldn't really be that loud. You can get utilities that will stop it spinning when it

has not been in use for a certain time, which might be a partial answer. Check out a PD library. As to the floppy drives, you can do this using many different NoClick utilities. In fact, you could use MultiCx from this month's Coverdisk as the NoClick idea is one of its many features.

The problem with the requestor for volumes that are copied to your drive is also easy to solve. You need to make an assign, which is a statement that tells the Amiga to look in a specific directory every time it needs a file from a specific disk instead of asking for that disk. As you'll want this every time you boot up, the best thing is to add this to your user-startup.

Open up the User-startup file (which is a script that the Amiga executes every time it boots) which can be found in S: (that is actually an assign to dh0:s or whatever the name of your Workbench partition is). Go to the end and insert the following line: assign name1: name2:name3 – where name1 is the name of the Kindwords disk that the requestor asks for, name2 is the name of the hard drive partition and name3 is the name of the drawer you put Kindwords in. If you get a requestor for more than one Kindwords disk, then enter assigns for all of them, simply replacing the name1 in separate lines.

Dave

Can't find CGFonts

Having recently purchased Professional Page 4.1 and installed it onto my hard drive, I have found a problem when I run the program. It

keeps asking me to insert volume CGFonts into any drive. Should I have a disk called CGFonts?

Ken Stefanoski
Herts

The message is telling you that ProPage requires a volume called CGFonts. This is a virtual device created when you add an assign command to your User-startup or the Startup-sequence (both found in the S directory).

Because ProPage can't find CGFonts, the assign the hard disk installer created initially, has been overwritten when you clicked Proceed when asked if you wanted the Assign for Spell to be added. At this point, you should have clicked No or Skip so the installer would not overwrite the assign it had already added. This note is documented in your manual.

When your Amiga is turned on or you reset it the Amiga's operating system looks at two files in the S directory. The first is the Startup-sequence and the second is the User-startup. These files contain commands the Amiga acts upon as it goes through its starting procedure. Often, there will be assign commands here. In this case you could create a disk called CGFonts and put your Compugraphic fonts in there, but ProPage would be slower having to read fonts from floppy disk and there's not a lot of room on the disk for many fonts. So an assign for CGFonts creates a sort of virtual disk on your hard drive. When you run ProPage it looks for this disk and the system will point it in the direction of the drawer called CGFonts.

Larry ■

Fill in and get answers to your questions

AS68

If you send in a question for the Amiga Answers experts, please fill in and include the form below (or a photocopy if you don't want to cut up your magazine). If you have several questions in different fields that should be addressed to more than one of our experts, please send in your queries on separate forms.

Send your form and question to: Amiga Answers, Amiga Shopper, 30 Monmouth Street, Bath, Avon BA1 2BW.

Name: _____

Address: _____

Post code: _____

Your machine:

- | | | | |
|--------------------------------|------------------------------------|--------------------------------|--------------------------------|
| <input type="checkbox"/> A500 | <input type="checkbox"/> A500 Plus | <input type="checkbox"/> A600 | <input type="checkbox"/> A1000 |
| <input type="checkbox"/> A1200 | <input type="checkbox"/> A1500 | <input type="checkbox"/> A2000 | <input type="checkbox"/> A3000 |
| <input type="checkbox"/> A4000 | | | |

Approximate age of machine: _____

Kickstart version (displayed at the "Insert Workbench" prompt)

- | | | | |
|------------------------------|------------------------------|------------------------------|------------------------------|
| <input type="checkbox"/> 1.2 | <input type="checkbox"/> 1.3 | <input type="checkbox"/> 2.x | <input type="checkbox"/> 3.x |
|------------------------------|------------------------------|------------------------------|------------------------------|

Workbench revision (written on the Workbench disk)

- | | | | |
|------------------------------|------------------------------|--------------------------------|------------------------------------|
| <input type="checkbox"/> 1.2 | <input type="checkbox"/> 1.3 | <input type="checkbox"/> 1.3.2 | <input type="checkbox"/> 2.04/2.05 |
| <input type="checkbox"/> 2.1 | | <input type="checkbox"/> 3.0 | |

PCB revision (if known). Do not take your machine apart just to look for this! _____

Total memory fitted (see AVAIL in Shell for Workbench 1.3) _____

Chip memory available (see AVAIL in Shell) _____

Agnus chip (if known) _____

Extra drive #1 (3.5in/5.25in) as DF : Manufacturer _____

Extra drive #2 (3.5in/5.25in) as DF : Manufacturer _____

Hard disk: _____ Mb as DH _____ :

Manufacturer _____

Extra RAM fitted – type, size in Mb and manufacturer _____

Please indicate details of any other hardware which could help us to answer your question:

Now, use this space to describe your problem, including as much relevant information as possible. Please continue on a separate sheet if necessary.

Choice

Domain

From some really useful utilities, through to some slightly suspect clipart, **Steve Liddle** searches the world of Public Domain programs to bring you the best and worst of what's available.

Amossible II

This disk is designed for people attempting to learn the Amos programming language. There are scores of little Amos files mostly containing small example programs with accompanying text 'remmed' in to explain what is happening. If you have any knowledge of Amos you won't learn much because it's really basic stuff. For example, what are variables and how do you use them? But, if you're someone taking your first bite at programming Amos then this will certainly help you to understand the very rudimentary.

Amos is probably the easiest and most friendly language on the Amiga, but it's now so outdated it's lost its momentum. Even so, it is still a fine language to cut your teeth on.

The Amossible disk has no presentation to speak of, but that doesn't really matter as all you have to do is load the files directly into Amos. It is obvious a lot of work has gone into the writing of the tutorial text and it feels like the author genuinely does want to help you learn. Amos newbies, Check it out.

Verdict: 82%



Rock Disk 7: The mods may not sound quite like the originals but they're still worth hearing.

Rock Disk 7

Unsurprisingly, this is a disk packed with crunched Med modules of rock classics from bands like Guns 'n' Roses, Metallica, Nirvana and Bon Jovi. The mods are by a selection of authors but they've been fished out of the PD by a team calling themselves 'Whirlygig'. Make what you will of that! There are no vocals, just the backing music, and some tracks do not sound much like the original. The majority of the songs though are foot tappingly good and skillfully put together, but I can't help thinking to myself, what use? Karaoke perhaps?

Verdict: 70%

Beginners guide To Fishing

This tutorial has literally been thrown together using Magnum, a disk mag creator. Magnum is a bit old and creaky these days but, when skilfully used, can look the part. Sadly, the author of Guide To Fishing has made an awful job of the presentation. A terrible custom control panel, gross looking pictures of the fish and abominable spelling make for a sadly lack-lustre piece of work. If more time had been spent on the presentation and spelling then maybe a few interested people might even register for the full version.

The actual information content is minimal, usually a few lines of text and a picture on each subject. Some of the subjects covered are types of UK fish, floats, rods and poles. Perhaps if the author got hold of a hand scanner and a spell checker then he could be in business, as something like this could well be of interest to novice anglers.

Verdict: 45%

Who, what, where, when, why, how...

Product	No of disks	Type of product	Price	Supplier	Contact	Verdict	Page
Guide To Fishing	1	Tutorial	0.75	OnLine PD	01704-834335	45%	37
Macs Help cat disk	1	Tutorial	0.75	OnLine PD	01704-834335	68%	38
Lotsys/Lotgraph	1	Lottery	0.75	OnLine PD	01704-834335	80%	38
Rock Disk 7	1	Music compilation	0.75	OnLine PD	01704-834335	70%	37
Beavis & Butthead	1	Slide show	0.75	OnLine PD	01704-834335	31%	38
Virus WorkShop	1	Virus Checker	0.75	OnLine PD	01704-834335	95%	39
GBaselI	1	Database	0.75	OnLine PD	01704-834335	40%	39
Vark 14	1	Util compilation	0.90	Roberta Smith DTP	0181-4551626	86%	39
Sauce & Code 4	1	Amos disk mag	0.90	Roberta Smith DTP	0181-4551626	85%	38
Third Dimension 26	1	3D const kit mag	0.90	Roberta Smith DTP	0181-4551626	91%	39
Charlie Cat Q 2	2	Animation	1.40	Roberta Smith DTP	0181-4551626	90%	38
Amossible 2	1	Amos Tutorial	2.00	49, Perrott Close, Witney, Oxon. OX8-6RU			
Maximal	372K	Paint package	N/A	gfx/edit/maximal.lha	ftp.wustl.edu	84%	40
Track2File	120K	File ripper	N/A	disk/misc/Track2File.lha	ftp.wustl.edu	80%	40
URL Manager V1	46K	URL Editor	N/A	comm/www/URLManager1_0.lha			
					ftp.wustl.edu	90%	40
Shimmer	43K	Database	N/A	biz/dbase/shimmerdb10.lha	ftp.wustl.edu	96%	40
Text View	36K	Text displayr	N/A	textshow/textview16.lzh	ftp.wustl.edu	90%	40

Beavis & Butthead

SlideShow

This disk simply consists of 13 lo-res, 32-colour scans of the Beavis & Butthead dudes complete with a metal soundtrack playing in the background. There aren't even any funny captions to go with the pictures, which may give non-Beavis fans something to do. You won't get any laughs out of this disk so unless you are a picture collector or a Beavis & Butthead fanatic then just don't bother.

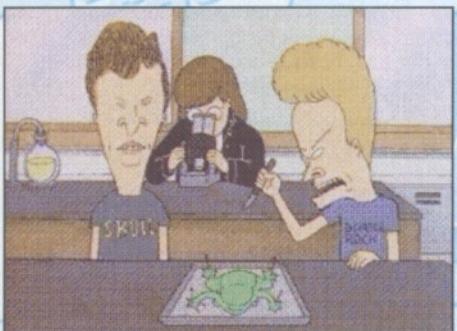
Verdict: 31%

Sauce 'n' Code issue 4

This is the farewell issue of Sauce 'n' Code, and it shows. Most of the source code supplied can be found on Aminet and there are virtually no articles to read. The source code that is there is good though, so if you do not have access to Aminet you will find some great routines on



They really are quite hideous and if you're not a fan then I can't see the appeal.

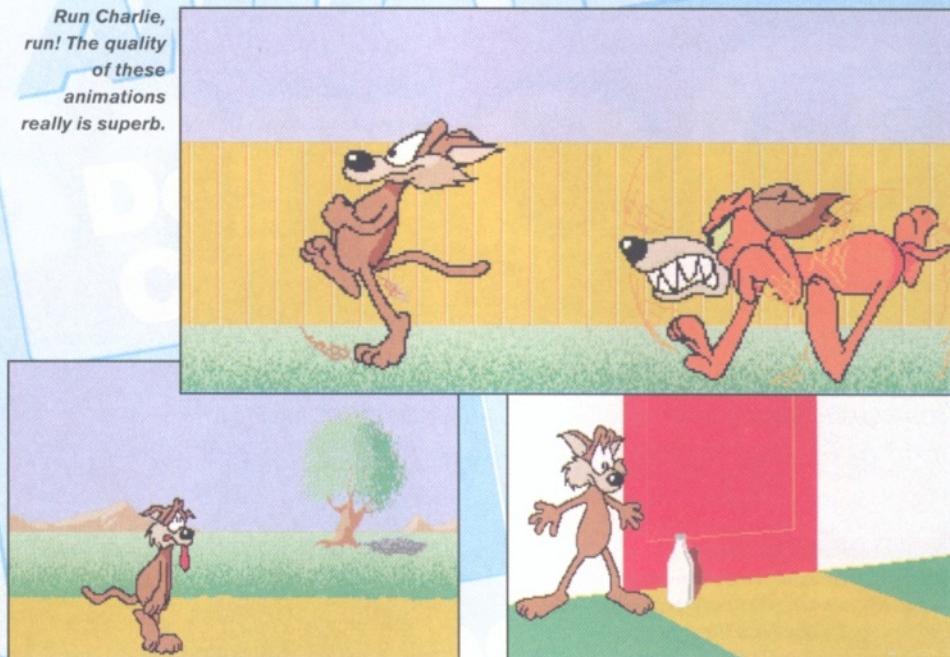


Animal Rights activists take note. I'm sure there are laws against this sort of thing.



I'm not quite sure who he is but he's hideous too. Check out that stubble.

Run Charlie, run! The quality of these animations really is superb.



A rather tired and thirsty looking Charlie with an exceedingly long red tongue.

here. For example there is source code to manipulate MUI, Radio buttons and ToolTypes, a GUI and File selector extension and source to a game. The interface is the best I have ever seen on any Amiga disk mag and the whole thing is put together very professionally. This final issue though isn't really a disk mag, it is a disk of very good source code. A sad farewell.

Verdict: 85%

Charlie Cat Quickie #2

AMIGA As far as I am concerned Golf, Cricket and Tennis are great participant sports, but a real bore for spectators. Animations are the same, they are great fun to create, but after being watched once by an impartial spectator, like me they are usually discarded and never looked at again.

I thought I had better check out this famous Cat called Charles just in case it was something out of the ordinary. I am glad I did because this cartoon animation is really quite delightful. You can see the hard work that has gone into every frame of the cartoon and it works splendidly.

The story is that Charlie The Cat is very thirsty and needs to find some water. This may not be the greatest of scenarios, but it is entertaining enough. The whole cartoon lasts just over a minute and it's a bit like seeing a clip from the RoadRunner cartoon. You won't feel like you have wasted your money though because it is all done so well. One for the collection I think.

Verdict: 90% **Star buy**

Mac's Help cat disk

A rather muddled title for a tutor that claims to help you create 'catalogue disks'. There is roughly 13K of text explaining what you need to

At long last - the bottle of milk to quench Charlie's thirst that he's been searching for.

do and some rather old PD utilities to do it with. The general idea is to help beginners understand how to set up a bootable disk and display some text, a picture and play some music. This is good and it may help some people. The next version promised will hopefully increase the small amount of information on offer and use better and more recent utilities. Overall, Mac's Help cat Disk is a worthy cause, has its heart in the right place, but needs touching up somewhat.

Verdict: 68%

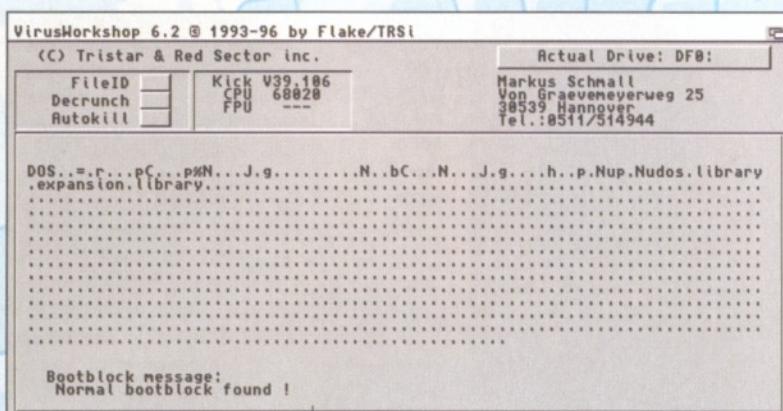
LotSys & LotGraph

Here we go again, another Lottery predictor. But, wait a minute, this is a little different from the usual fodder. LotSys and LotGraph use real forms of mathematical formula and charts in a fairly scientific way. As the author is quick to point out, the two programs supplied are not of a very user friendly nature, his excuse is that he wrote these programs for his own use, but that is a bit dodgy since these programs are Shareware.

However, once you have cottoned on to the unusual layout of the program and lack of user prompts things get easier. Sys and Graph are based on what appears to be unnecessarily complex groupings of previous Lottery results, one bonus is that the disk comes supplied with the first 79 weeks of Lottery results, you can register to get up to date.

The whole package is based around working out the probability of certain numbers or sequences of numbers that are about to appear in the next draw. You can fiddle with hot, cold, tepid and luke warm numbers, consecutives, number gaps and the obligatory random numbers. LotSys & Lotgraph do not actually tell you what numbers to pick, that is up to you and therefore leaves any results gleaned from the programs, good or bad, very subjective. This

No collection is complete without the obligatory virus checker.



that it can detect all the latest viruses and that is essential. Everyone needs a virus checker and everyone needs to be able to detect the latest viruses. VWS is probably the best, for the moment at least.

Verdict: 95% **Star buy**

AminetChoice

MaxiMal.lha

This is a children's paint package – well actually it is more orientated towards being a colouring book really. There are 24 pre-drawn pictures supplied, ready to colour in. Maxi-Mal is Freeware, you get the full uncripped version and even the Blitz Basic source code is provided so that budding programmers can learn from the code or adapt Maxi-Mal to their child's personal taste.

The not so good news is that the whole program is written in German, of course it is only bad news if you do not speak German! Maybe some good-hearted Blitz programmer will change the menu texts to English for us? It should be pretty easy armed with a German-English dictionary.

Having said that it is very easy to suss out where the load and save picture menu is and your children will have a fine time messing with this potentially great little program. This is a good example of the sort of little gems that can be found on the Aminet.

Verdict: 84%

Track2File.lha

This interesting utility claims to take non-Dos disks and rip the files off the tracks, allowing you to save them off. A great way of getting those commercial games onto your hard drive I thought. I tried Track2File on six commercial games but it failed to recognise the files on any of them. A modicum of success was had on one or two games though, the files were found and unpacked but then Track2File reported they were corrupt.

Admittedly the games I tested this on were quite old (I am not a games player at heart and

therefore only have a few lying around) so we should take that into account. If this program actually works, and on newer titles, it could be a great way of getting games onto your hard drive. The only problem of course is one of legality. Some people will obviously abuse a utility like this, but then again because you can buy a gun it doesn't necessarily mean you are going to murder someone with it, does it?

Verdict: 80%

URLManager1_0.lha

If you use your Amiga to surf the Internet then I guess you will have all the current World Wide Web browsers such as Aweb, Voyager and Ibrowse? And maybe you have access to a PC using Netscape and/or Explorer too? If so, it soon transpires that you have many different URL's on each browser's Hotlist.

Wouldn't it be nice to be able to edit parts of the hotlists and load and save these lists as ASCII or in the correct format for virtually any other browser? Well, now you can with URL Manager, an MUI driven utility that does everything you ever dreamed of with your hotlists and more in a clear, easy to use GUI. Essential surfing kit.

Verdict: 90% **Star buy**

ShimmerDb10.lha

There are plenty of databases around and one tends to ignore them after a while, especially if you have a database that does everything that you require of it. But I implore you to have a quick peek at a new program called Shimmer. It has a lovely GUI, is compact, fast and even though it is only on version one it has most of the features required to make it very useable indeed. Shimmer is written in Amiga E, a great advert for the language, and it is Freeware, a great advert for the Amiga.

What sets Shimmer apart from the rest is how easy it is to configure. Without reading any instructions I managed to set up a database, completely custom designed to my needs within a few minutes. You can have as many records in the database as your memory permits and you can alter the fields of your database at any time.

The author is currently working on the next version of Shimmer where the addition of an ARexx port, amongst other things, will enhance Shimmer no end.

As an extra bonus the AmigaGuide documentation is not only well written and informative, it is quite funny in places too. I like these type of programs, well written, slick, powerful, easy to use and free. Shimmer is an absolute corker.

Verdict: 96% **Star buy**

TextView16.lzh

Most Amiga users that prepare disks for general release use More or PPMore to display text files. The reason for this is mainly because they are both compatible with all Amiga's. PPMore is especially useful as it supports text files crunched with Power Packer and therefore saving precious disk space.

While these two programs are good, they are both very old and lacking in the extra features stakes. This is where TextView comes in. It supports the very popular XPK library and Power Packer crunched files and it works on any Amiga. Those are the qualifying criteria for a useable text viewer, but this program goes a bit further, offering some great extra features.

There is the ability to save the loaded text out as a crunched Power Packed file – very useful if you have a disk full of crunched files and you just need to edit a few words, you can now edit the file, pack it and replace the original all in one go.

Another novel feature is that if you were to load an AmigaGuide file into TextView then the guide codes will not be displayed. This is a really thoughtful feature that I found extremely useful. It is also quite configurable with palettes, fonts and screens and has a powerful search option. Some features are not available on older Amiga's, but the program will still work regardless. This is one cool text viewer. ■

Verdict: 90% **Star buy**

PD submissions

If you have some exciting PD disks that you would like to be considered for review in Domain Choice, send them in to Amiga Shopper, Future Publishing, 30 Monmouth Street, Bath BA1 2BW, clearly marked as a PD submission. We welcome any type of disk, except games.

If you are a PD house, make sure you include all the information necessary, such as how to contact you, how much the disks cost and how people can pay. If you are the author of the program, state where people can get your program from, and whether you would like us to consider it for inclusion on a future ShopperChoice Coverdisk.

AMOS

Part 4

You're really getting there now, say **Steve Bye** and **Malcolm Lavery** as they take the final step towards helping you make your millions. This month's procedures are the business...

This is the last tutorial on how to write a simple Lottery Predictor program. If you missed the previous issues you can order back copies on page 31.

Let's get stuck into the next procedure. The 'GRAPH' procedure begins with a set of '_3D_BUTTON' procedures that draw the buttons for the Graph menu. We looked at how the '_3D_BUTTON' procedure works a few issues ago. We then come to 'For-Next' loops that reset the graphs contents ready for fresh calculations. These loops clear all previously held data just in case the database has been updated since the last graph was calculated. The next part of the code prints the numbers at the bottom of the graph.

Now we come to the part where the program grabs the stored Lottery numbers from bank eight. A fairly straightforward 'For Next' loop is used. Then a call to the '_DRAW_GRAPH' procedure does the business for us. '_DRAW_GRAPH' uses similar code to that we have previously looked at. The next lump of code in this procedure just checks the graph control buttons and calls the relevant procedures when necessary. And, finally, if the 'QUIT' button is clicked on, the buttons are reset and usable again as the main menu. The 'PRINT_OUT' procedure is called when the user clicks on the 'Print' button and sends a hard copy of the graph to the printer. This is easily achieved in AMOS Pro with the following code, I have deleted all the 3D button calls, and so on, for clarity and to save space.

```
Procedure _PRINT_OUT
*****
* OPEN PRINTER AND CHECK IF IT'S
* ONLINE ETC
*****

```

```
Printer Open
If Printer Online=0
  Bell
  Text 320,100," TROUBLE!"
  Text 283,110," PLEASE CHECK
PRINTER"
  Wait 100
  Printer Close
  Pop Proc
End If
'
*****
' IF ONLINE THEN PRINT SCREEN GRAPH
'
*****
'
Printer Dump 110,20 To 635,200
Wait 10
Printer Close
End Proc
```

A nice, straightforward piece of code that needs no explanation. Two more procedures need to be covered to complete the Lottery graph functions. They are '_DISPLAY_NUMBER' and '_DISPLAY_RANDOMNUMBER'. The Procedure '_DISPLAY_NUMBER' is the code that works out the most frequent numbers. It starts off by clearing the 'PICKED' array of any old data:

```
For X=0 To 49
  PICKED(X)=0
Next X
```

Then the database is searched for the most frequent numbers. Again a fairly standard 'For-Next' and 'End-If' structure is used.

```
NU2=0
For P=1 To 49
  NU1=COUNT(P)
  If NU2<NU1 and PICKED(P)=0
    NU2=NU1
    FF=P
  End If
Next P
PICKED(FF)=1
WIN(1)=FF
```

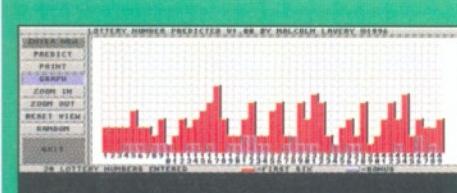
The above routine is modified and repeated to pick all seven numbers. Once we have the seven best numbers they're rendered to the screen by plucking them from the 'WIN' array.

```
Text 270,85,"PREDICTED WINNING
NUMBERS"
'
_3D_BUTTON[20,321,116,90,15,1,"CONTIN
UE",3,0]
'
NUMBER$=Mid$(Str$(WIN(1)),2)
NUMBER$=NUMBER$+
" +Mid$(Str$(WIN(2)),2)
NUMBER$=NUMBER$+
" +Mid$(Str$(WIN(3)),2)
NUMBER$=NUMBER$+
" +Mid$(Str$(WIN(4)),2)
NUMBER$=NUMBER$+
" +Mid$(Str$(WIN(5)),2)
NUMBER$=NUMBER$+
" +Mid$(Str$(WIN(6)),2)
BO$=" "+Mid$(Str$(WIN(7)),2)
```

Once you have had enough of that and you click on the 'Continue' button the '_DRAW_GRAPH' procedure is called to redraw the original scene. The last procedure, '_DISPLAY_RANDOM', picks seven lottery numbers at random.

```
FLAG_1=0
Repeat
  NUM=1+Rnd(48)
  If PICKED(NUM)=0
    PICKED(NUM)=1
    FLAG_1=1
    NUM1$=Mid$(Str$(NUM),2)
  End If
Until FLAG_1=1
```

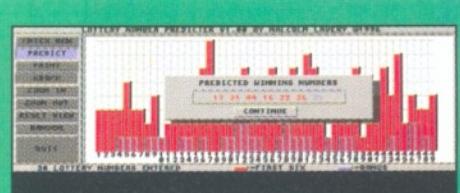
The above routine chooses a number between 1 and 49 and stores it in the 'PICKED' array. It checks that the number hasn't been selected before. If it has, a new one is chosen. The routine is repeated until seven different numbers are picked. They are displayed, the Continue button is clicked and the graph is redrawn. ■



The graph is up and running and displaying the first 30 weeks results of the Lottery.



The Random number option now works too. Allowing you to pick seven random numbers.



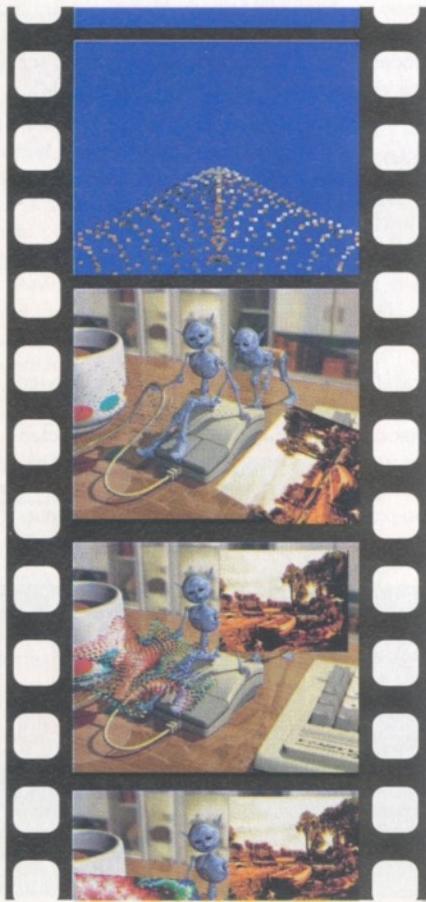
You can zoom in and out if the bar chart is even and no obvious number sticks out.

X-DVE 2.5

David Taylor shows you how to do a rather impressive double animation effect with this brilliant new video effects package from Italy.



The first anim was rendered using a poor background and fewer colours because it is going to be shrunk to under a quarter of the screen size in the second animation.



The new version of X-DVE was reviewed last issue and given a Star Buy. This month, we thought it would be good to show those of you who've bought it how to take advantage of one of its most advanced features - and if you haven't bought it yet, maybe this will encourage you to do so.

X-DVE 2.5 has a new brush import feature called MultiBrush. This allows you to choose an animation made up of IFF frames as an object, by defining a base filename and the type of extension used, eg. 001. This is a refinement of the IFF anim brush which you can import and it means that you can create one project with X-DVE, render it and then use it as an object within a second X-DVE project.

In fact, you could use this method as many times as you want and have multiple animations brought in with effects as a new project or over the top of a current project. It's all very exciting stuff, and yet it is remarkably easy to do. Here's how:

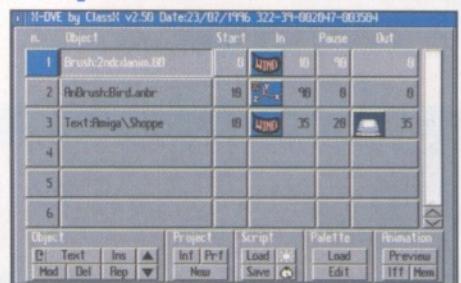
Step 1:

Set up your first project. This will be the animation that you will have playing as a smaller window in the second animation. Because of this you can afford to reduce the number of colours in the animation. This will allow the second animation to show up and make sure that you don't end up with a horrible looking



animation and massive remapping overheads. I used 64 colours for the example, but 16-colours may well be sufficient.

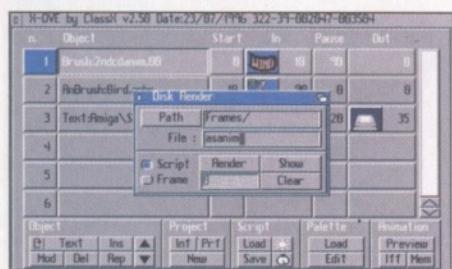
Step 2:



Design your project as normal. Bear in mind that if you have a blank screen or objects flying across a blank background that this won't be transparent on the final animation and that you may be showing a lot of blue screen for no

apparent reason. It's best to bring in a background quite quickly and keep it there, although exploding it out towards the end looks very good on a second animation when it is already being removed by a separate effect. Make sure that you have all the objects remapped using F-S (Floyd-Steinburg) or they will not retain their original colours and they'll look very strange.

Step 3:



Render the project as normal and choose the Disk Render option to create a set of separate IFF frames. This will create the whole animation as a set of consecutively numbered frames which you will then be able to use in the next animation.

When it's rendered show the script; it will be a little jerky because it has to load each frame from disk, but it will give you a rough idea of how it will look and the ability to make sure it has worked as you wanted. (You can also do a preview of the script before rendering.)

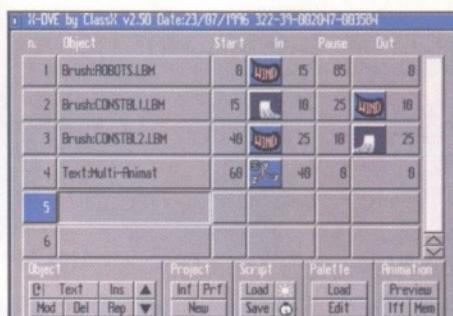
Step 4:



Now clear the memory and script and create a new project. This time make sure that the screen has as many colours as possible. This will depend on the previous animation and any other objects that you will be using. It's likely that you'll need the full 256-colours, but if you are using only the same 16-colours, obviously you can use less colours. The fewer colours you use the quicker the animation can be rendered.

Step 5:

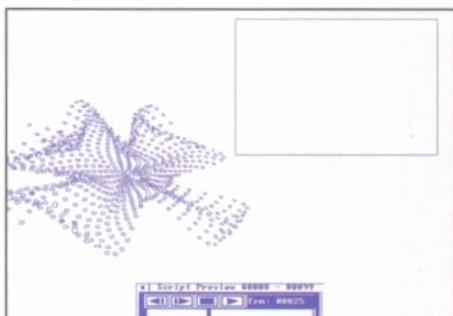
Now create your new animation script. Remember that every object appears on top of the ones that precede it in the script so if you have a background picture, make sure it is first in the list or else everything will happen underneath it! Also ensure that you have the F-S remapping set for all the objects, unless they have the same colours, because otherwise the palette will be completely wrong.



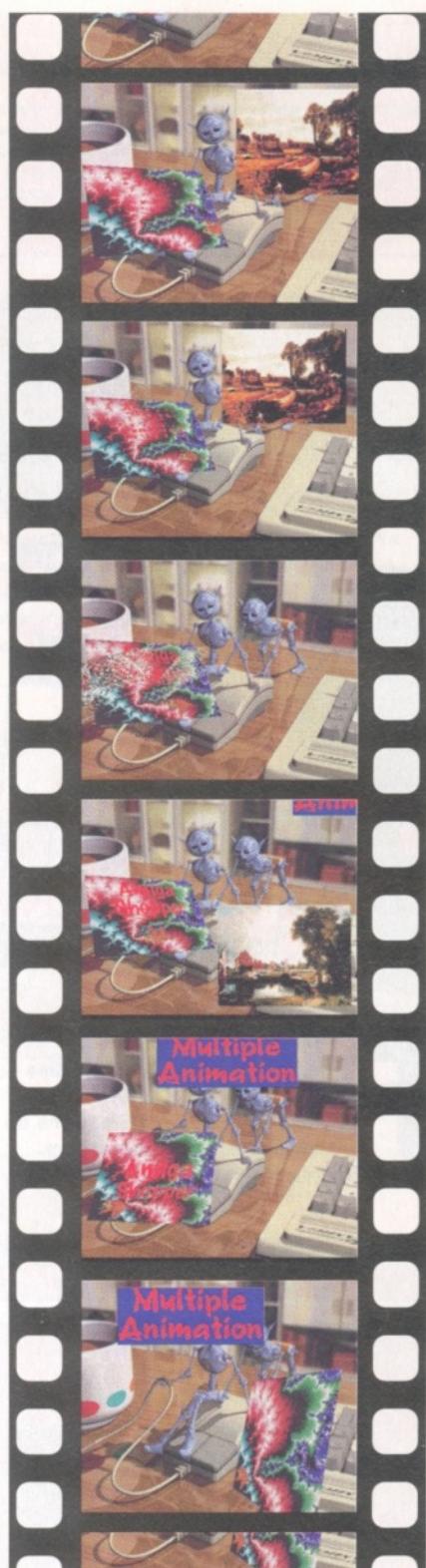
Step 6:

Select the Multi-Brush object from the Object section. Select the first anim frame from the first animation that you produced and set the F-S Remap. Choose the number of frames that are in the animation and set the format that the file series takes, which should be "00000", in the "Fmt" box. Now set the effects for the object as you would for any object. In the Pause section, use the mouse to reduce the Z axis so that the object is down to a suitable size on screen or else the object will simply appear over the top of the rest of the animation. X-DVE will now re-scale and remap every frame when it renders the animation. That's basically it. As long as everything has been set correctly, you will have created an animation which has a second X-DVE animation coming in and out as an object.

Step 7:



It is really wise to take a preview look at this animation because it is likely to take quite a few hours to render. After all aside from the unusual objects, it will have to import, scale and remap a separate frame with each frame as well as work out any effects on that animated object and any other objects. If you have decided to have more than one X-DVE animation as objects then the render time is likely to be very long, even on a fast Amiga. This one took over a day on an '030, but it was worth it.

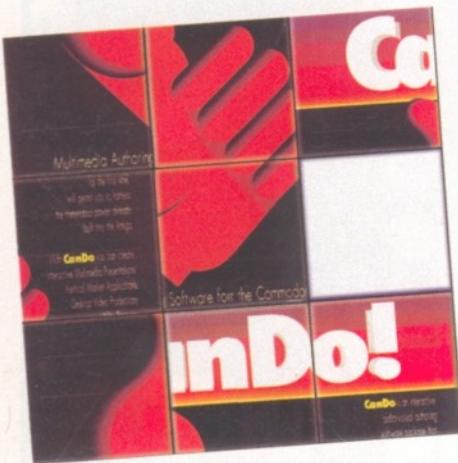


The final animation shows all the usual text and picture effects, but as you can see it also brings in and out a separate animation that continues to play as the rest of the animation goes on. It was all re-scaled and remapped internally by X-DVE.

CanDo part 5



Action! **John Kennedy** explains how animations can be included in a CanDo deck for impressive multimedia effects.



Few people realise what excellent animation facilities CanDo offers. CanDo can display multiple animations on screen at once, move them around and synchronise other events on a

frame-by-frame basis. Want to display a person talking with full lip-sync? It's no problem with CanDo.

There are only a few "buts" to do with the animations, and in general they shouldn't offer many problems. The hardest part is creating the animations in the first place. I used my current favourite piece of Amiga hardware, the VideoMaster from Eyetech. This grabs frames of video at up to 25 frames a second in 16 shades of grey: perfect for multimedia applications. When adding animations to your own CanDo decks, here are the special points you need to remember.

1. CanDo deals with BrushAnims, not normal Anim files. You'll need to make sure that your anim is in the necessary format, and the best way to make sure of that is to load it into a paint program – something like Deluxe Paint. Deluxe Paint includes a feature which enables

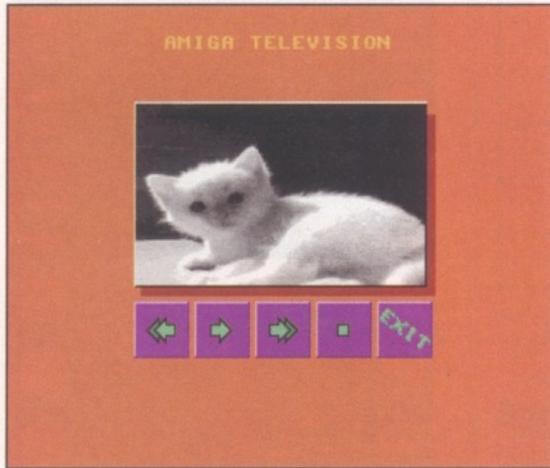
you to cut out and save a sequence of frames as a brush anim.

2. The palette from the brush anim is not automatically loaded. If you use the default screen colours there is even a chance the colours will be corrupt. One way around this is to make a special "front panel" display over which the animation will appear. Not only does this sort the colours out, but it allows you to create an attractive border.

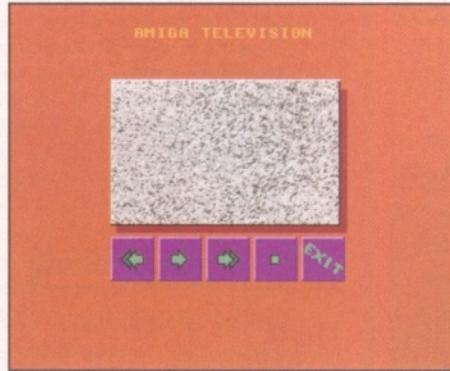
3. Brush anims sometimes deal with colour 0 as transparent. This makes some very neat effects possible, but it can also cause apparent corruption if you don't remember to take this into account.

Now let's see how to create a stand-alone deck which will display an animation and offer a few simple to use controls into the bargain. Later on we'll see how to integrate this into the multimedia database.

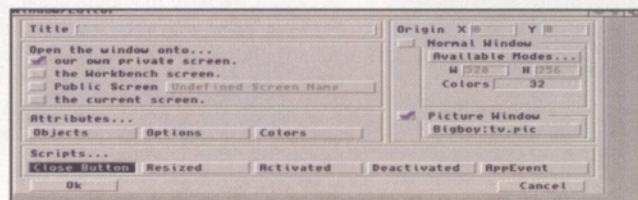
Animations in CanDo



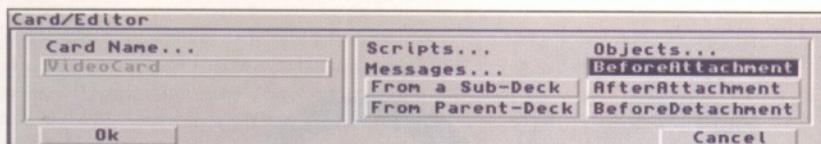
1 Using a paint package such as Deluxe Paint or Personal Paint, draw the control panel for the video display. Notice how I have already loaded one frame into the image: this will let me accurately draw a border and also ensures that the first sixteen colours are correct.



2 Still within the art program, I then expanded the image to use 32 colours, and drew images acting as the buttons. Before saving, I deleted the frame of animation and replaced it with a static effect, in keeping with the video replay look.



3 Now create a new CanDo deck, and edit the default Window. Load in the backdrop image making sure the colours are set to 32 and the resolution is correct. I've also switched off the Quit gadget and deleted the title to get rid of all screen borders.

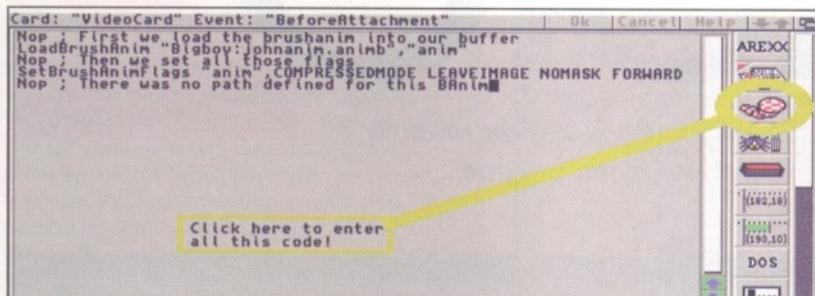


4 For this example, I'm going to assume we know in advance the animation which is to be played. We know the filename and path, and so

can enter it directly into any requestors. Later you can substitute a variable name. Now edit the default deck, and edit the script entitled *BeforeAttachment*.

Wierd Can Do errors

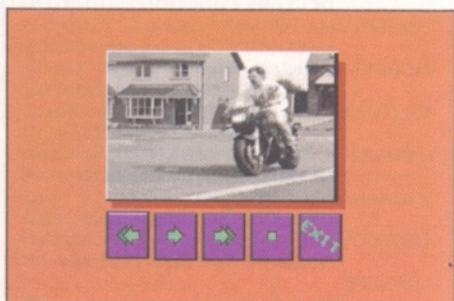
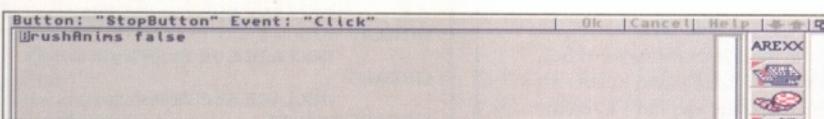
If you are experiencing weird error messages when CanDo loads, it could be because you are using a screen mode which is incompatible. Make sure you are using a standard PAL or NTSC screen mode, and no screen mode promotion utilities are running in the background.



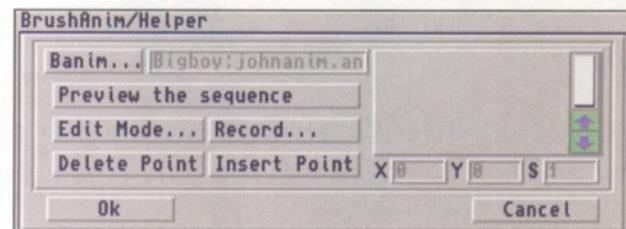
5 This is the script which is executed as the deck's display is being opened. It's a good place to load the animation in advance, so it's immediately available when the deck is selected. Here's the script you need to add. You'll have to take your own filename into account. Click on the Animation icon to make things easier!



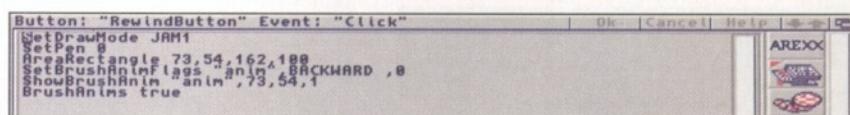
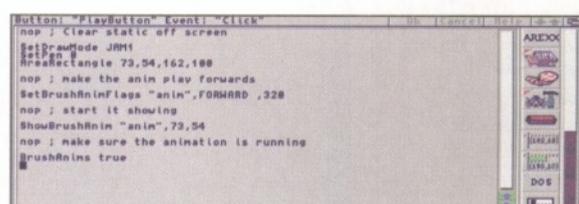
7 Now we can add the buttons. Rather than use separate images for each, I'm making use of the "fake" buttons I've already drawn on the screen. The key is to use the AREA option, which makes the traced area on the screen a "hit spot". You lose the ability to animate buttons, but it saves time.



13 When you browse the deck, you can now use the video buttons to play, fast forward, rewind and stop your animation. Click on exit to stop.



6 This is the requestor which opens when you click on the Animation icon. You can ignore the part about Editing a sequence: this is to do with CanDo's ability to re-position the Animbrush all over the screen. We'll be keeping our brush in the middle of the screen for the moment at least.



9 Create scripts for the other buttons too: here is the script for rewind.

```
SetDrawMode JAM1
SetPen 0
AreaRectangle 73,54,162,100
SetBrushAnimFlags "anim", FORWARD ,0
ShowBrushAnim "anim",73,54,1
BrushAnims true
```

10 Here is the fast forward script. It's the same as the Play script expect the animation is played at its fastest possible speed and only the once.

11 Here is the stop script. It's not very complicated, but it makes use of the true/false value following the "BrushAnim" command.

12 Finally, here is the Exit script. It flushes the animation out of memory, and then exits the deck.

that frame number.

ShowBrush "anim name", X, Y][,paletteflags [MinTermValue]]

The important parameters are the name of the brush anim and the X and Y co-ordinates. When used with ResetBrushAnimFrame you can display any frame of the animation you choose.

If you use PingPong instead of Forward or Backward you can make the animation repeat over and over simply by changing direction at the end. ■

RemoveBrushAnim "anim"

You can use other animation commands to set the individual frame number and to display a particular image. This would allow you to create buttons which zip to the start or the end, and also to step through the animation frame-by-frame. The commands you need to use are:

ResetBrushAnimFrame "anim Name" [,FrameNumber]

This will reset the anim to its start (the default action), or if you include a number, to

HiSoft BASIC2

This month **Paul Overaa** shows you how to add fully-fledged tracker module playing facilities to your Basic programs with just a dozen lines of code...

The HiSoft tutorials that we've been running over the last six months have been concerned solely with the use of HiSoft's O/S (operating system) links. The '.bc' and '.bh' files supplied with the package essentially duplicate the Amiga's system headers and provide the library declarations that allow a Basic program to use system functions normally only available from C or assembler.

The idea is that these system links enable coders to add virtually any facility required to a HiSoft Basic program, but there is another

Listing One

Function: `error = GetPlayer&(midi)`
This routine allocates audio channels, timers, etc. If "midi" is nonzero, serial port is allocated and initialised. If everything is OK, `GetPlayer()` returns zero. If initialisation failed or somebody else is currently using the library, then `GetPlayer()` returns a nonzero value.

Function: `FreePlayer()`
This routine, which has no parameters or return value, frees all resources allocated by `GetPlayer()`. Remember always call this routine before your program exits. If you don't audio channels, timer etc. will remain allocated until reboot.

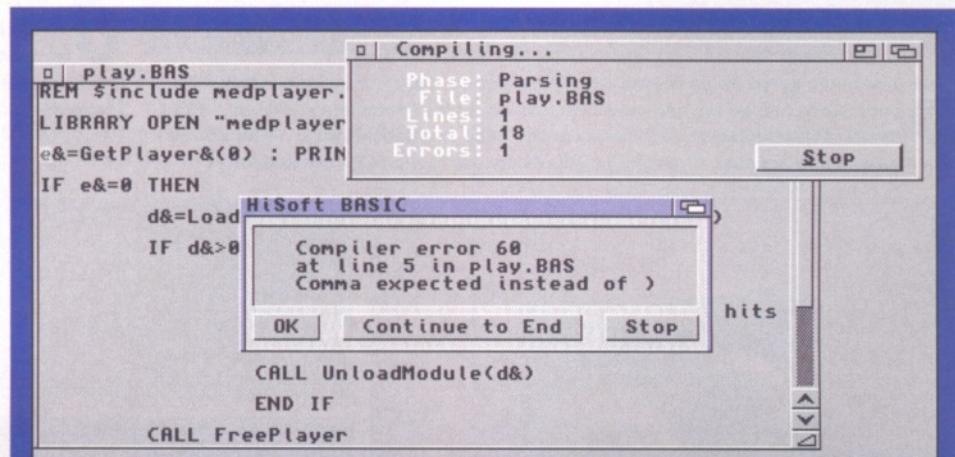
Function: `PlayModule(module)`
This routine starts to play the module from the beginning.

Function: `module = LoadModule&(name)`
When you want to load a module from disk, call this function. The function loads only MED modules (MMD0/MMD1/MMD2). Pointer to module will be zero if it failed to load.

Function: `UnLoadModule(module)`
Used to free up module memory when module is not needed anymore.

Function: `StopPlayer()`
No parameters or return value this function simply stops the module playing

• Most third party libraries include textfiles that document the functions. These particular descriptions are based on the medplayer library documentation



These are the type of errors that the faulty bmap file was causing!

approach that may be easier than tackling the operating system libraries head on. I'm talking about the use of third party libraries – libraries developed by independent users and software companies. These offerings actually come in one of two forms – run-time or linker library type, but it is the former entities that I'm taking an interest in this month.

It should be pretty obvious that these third party libraries, once opened, can be used in pretty much the same way as standard Amiga system libraries. The big difference however is that, whereas with the system libraries HiSoft themselves provide the associated header files – with third party offerings you have to create suitable headers yourself. You must also generate a .bmap file because HiSoft Basic will need this in order to compile programs which use the library.

Right, that's the theory – what we now need is a concrete example so that the various stages can be explained step-by-step. I've chosen OctaMED's medplayer library firstly because it's easy to use, and secondly because I don't think many people realise just how simple it is to add MED-style module playing facilities to a HiSoft Basic program...

MED Module Playing

If you've ever looked in OctaMED's Programmers drawer you'll have found the

Listing Two

```
' REM $include medplayer.bc - 
uncomment & create if required!
LIBRARY DECLARE
"medplayer.library"
DECLARE FUNCTION GetPlayer&
LIBRARY 'midi_flag&
DECLARE SUB FreePlayer
LIBRARY
DECLARE SUB PlayModule
LIBRARY 'module&
DECLARE SUB ContModule
LIBRARY 'module&
DECLARE SUB StopPlayer
LIBRARY
DECLARE SUB SetTempo
LIBRARY 'tempo&
DECLARE FUNCTION
LoadModule& LIBRARY 'name&
DECLARE SUB UnloadModule
LIBRARY 'module&
DECLARE FUNCTION
GetCurrentModule& LIBRARY
DECLARE SUB ResetMIDI
LIBRARY
REM next two functions are
available only in V2 of the library...
DECLARE SUB SetModnum
LIBRARY 'module_number
DECLARE SUB RelocModule
LIBRARY
```

• A header like this is needed in order to use the medplayer library. Notice that functions without return values need to be declared as SUB's not FUNCTIONS!

medplayer library along with its documentation and various support files for C and assembler coders (**Listing One** shows brief descriptions of the functions in the library that have been used in this month's example).

In order to use these functions from HiSoft Basic the first step is to produce a header file which declares both the library and the available functions. **Listing Two** shows the file which I created from the autodoc style descriptions of the library functions. Due to the nature of this library I didn't need to build a separate constants file but if there were large numbers of symbolic constants associated with a library then the idea would be to convert them to CONST statements and place them into a separate '.bc' file (which could then be automatically included during compilation by starting your '.bh' header file with a \$include <filename> meta directive).

Having created the header the next step was to generate a bmap file and store it in the HiSoft Basic assigned BMAP: drawer. Bmap files are, in theory, easily produced by converting the fd (function description) files that all third party libraries are supplied with using the HiSoft FDtoBMAP utility. I say 'in theory' because when I used my copy of FDtoBMAP – it didn't work. More precisely it generated a bmap file that was faulty and this came to light the moment I tried writing a short test program.

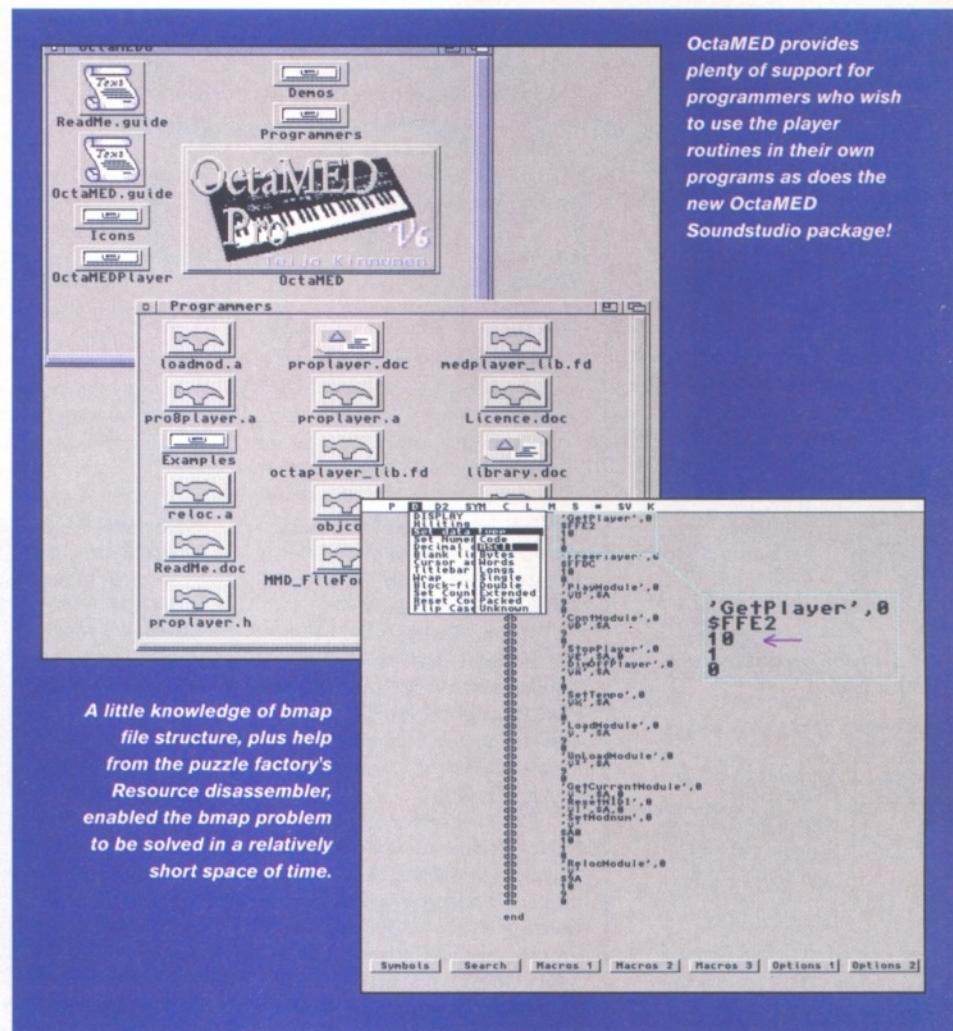
Listing Four shows the test code used. We open the library in the normal way, call the GetPlayer&() function to set up the sound system and then, providing this returns a zero (no error) value, a song module is loaded and played by making successive calls to LoadModule() and PlayModule(). With only a dozen lines or so of code involved, there was little or nothing that could go wrong. Nevertheless it did – and the compiler complained bitterly telling me that I was supplying too many (or sometimes too few) parameters in the function calls I was making.

I re-checked the code, the '.bh' header that had been created, and even the medplayer library fd file in case that was faulty. It wasn't

Listing Three

```
* prototypes for medplayer.library V2.0 - V6.0
##base _MEDPlayerBase
##bias 30
##public
GetPlayer(initser)(D0)
FreePlayer()
PlayModule(module)(A0)
ContModule(module)(A0)
StopPlayer()
DimOffPlayer(dimlength)(D0)
SetTempo(tempo)(D0)
LoadModule(filename)(A0)
UnLoadModule(module)(A0)
GetCurrentModule()
ResetMIDI()* functions below in V2.00 or later
SetModnum(modnum)(D0)
RelocModule(module)(A0)
##end
```

• The physical order of these fd file entries allow library access details (LVO references) to be calculated whilst the entries themselves contain function name and register information.



A little knowledge of bmap file structure, plus help from the puzzle factory's Resource disassembler, enabled the bmap problem to be solved in a relatively short space of time.

and, after several hours experimenting, I concluded there was a problem with the bmap file produced by HiSoft's FDtoBMAP utility.

To cut a long story short I loaded the bmap file into a disassembler (the Puzzle factory's excellent Resource disassembler was used) and took a look at the contents. Luckily bmap files have quite a simple structure: Each function entry starts with a null-terminated function name followed by a 2-byte LVO offset value, followed by a null-terminated, number coded, list of 680x0 registers that the function uses. The fault? My copy of the FDtoBMAP utility was writing linefeed (0A hex values) after the 2-byte LVO offset field and so was quite incapable of creating valid bmap files.

I'm using the first release of HiSoft Basic 2 (version 2.00) and chances are that all copies of this release will contain a faulty FDtoBMAP utility. I fixed the bmap file by writing a short ARexx script to remove the offending linefeed characters. HiSoft, who are now aware of this problem, tell me that a fix is underway!

Coverdisk Code

On this month's coverdisk you'll find some example code, a modified medplayer.bmap file (which you should copy to your BMAP: assigned drawer if you wish to recompile the example or experiment with your own programs), and a demo song module courtesy of Gareth and Kevan Craft (the Craft brothers).

Just double click on the 'Play' icon to start the runnable version and hit any key to stop the demo. Needless to say you also need to have the medplayer library in your LIBS: drawer in order for the demo to work. Chances are you've got this library on your system already but, just in case, RBF software have kindly allowed us to put this on the coverdisk as well! ■

Listing Four

```
REM $include medplayer.bh
LIBRARY OPEN "medplayer.library"
e=&GetPlayer(&0): PRINT "Hit any key to quit"
IF e=&0 THEN
    d=&LoadModule(&(SADD
        ("EmptySpaces"+CHR$(0)))
    IF d>&0 THEN
        CALL PlayModule(d&)
        x$=INPUT$(1) 'play song until user hits a key!
        CALL StopPlayer
        CALL UnloadModule(d&)
    END IF
    CALL FreePlayer
END IF
LIBRARY CLOSE

• A dozen lines of code – all that's needed to add MED-style tracker support to a HiSoft Basic program!
```

Talking Shop

AAnother selection of your views and opinions and there's some useful advice on obtaining a monitor too.

Pretty Crummy



It's a pity that each edition of AS decreases and with that you get less pages and floppy disks. But that's life, you can't live on fresh air! I have had three Amiga computers since Summer of '88 and I just love them. But in the summer of '95 I bought a 486DX2 PC and thought I would sell my A3000. I didn't get the "right" price so I've kept it. This provided me with an opportunity to compare it to the PC that all but Amiga-lovers think is superior.

At first I was amazed how many programs were in Swedish, my main language; the PC has smart help available on F1 and a comfortable way to exchange the running program (Alt + Tab). But as I install more and more programs, it just gets slower and slower... It doesn't even help if you uninstall the programs. You need drivers for everything. Some games won't work without these or simply won't work at all. Amazing...

Then at the end of 95 I installed Win95 (no beta), the great OS that would fix all those faults in old Windows. What happens?

Yes, the surface is nice, but the computer starts to crash and sometimes the only option was the On/Off-button. I feel that the OS operates slower than when I first installed it, but with less crashes. Can it fix itself?

Today I occasionally use the PC for Netscape, maybe also for printing a nice letter. The rest of my computer time, say 90%, goes for my old trusty A3000: Programming in C, Usenet (Thor), ftp and WWW (IBrowse).

Maybe it's not as fast in raw speed, but it won't crash without reason and it won't slow down if you choose to install more programs. I control the computer when I'm using the Amiga but on the PC, Windows almost controls me...

Even so, I'm glad that I have some experience of the PC. It gives me a chance to do a "fair" comparison. If you look under the surface it's obvious what to choose. But I won't sell the PC as the price is only a third of what I gave for it. Now I look forward to the new PowerAmiga or maybe an accelerated A4000 as they are becoming much cheaper.

Roland Bengtsson
Sweden, Email

How to contact us



Write in to Talking Shop, Amiga Shopper's letters pages, and you could win yourself some cash. The Star letter published every month receives £25.

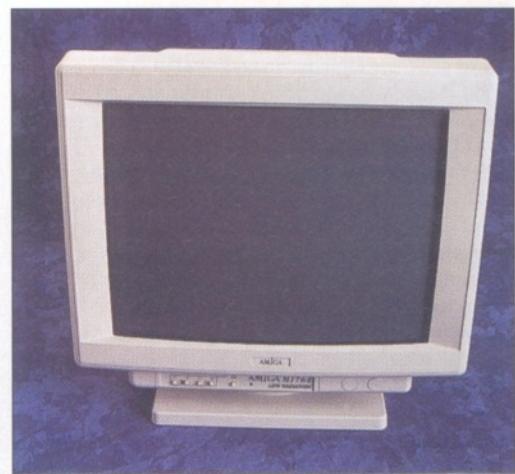
So, pen to paper and send your letters in to:
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Amiga Shopper,

Future Publishing,
30 Monmouth St,
Bath, Avon BA1 2BW.
Alternatively, you can E-mail your letters to:
amshopper@cix.compulink.co.uk
davetaylor@futurenet.co.uk

All the letters received at these addresses will be considered for publication, unless you specifically advise us otherwise.

The decline of the Amiga market is a sad time for all of us – not least for those who have spent many years working on successful Amiga mags.

David Taylor takes the brunt of your anger again.



The M1764 is definitely a superb piece of machinery. Read on to find out how to get it at a decent price.

It is certainly very interesting to get some experience on a PC. I agree wholeheartedly with you that a lot of people who are leaving the Amiga for the PC see the other platform as some sort of golden goal. The truth is that the PC has come a long way since the times when there was no point even trying to compare the two platforms.

Nowadays, with superior graphics and multi-tasking, the PC, on the face of it, looks the more attractive. It has all the marketing power of Microsoft behind it, a sexy looking OS, masses of quality software and very fast processors.

However, after some time working with them, anybody who is used to an Amiga will be cursing its shortcomings. The PC takes two to three minutes to boot up, which is a real pain if you have to reset because of a system crash. Every program requires a set of custom files (.dlls) to work. Now you could say that the Amiga has its custom library system, but the Amiga is sensibly laid out and you only need a little bit of understanding to be able to sort out any problem – especially using the wonderful SnoopDOS.

The PC has insane file names, no seeming order to the placement of files, no way to track errors in the way the Amiga does, massive system overheads for the OS, crappy Win.ini files to be edited... I could go on. Yes, the PC has come a long way, but it has got a lot further to go before it

gets a system that is as genuinely user-friendly as the Amiga's, which is what makes it twice as galling to have to sit and watch it winning in the marketplace.

17 inches of pleasure

Just thought I'd send in a bit of info on the Amiga M1764 17" monitor. Hands up who wants one – everyone – I thought so. I have found the answer at a very reasonable price. I got one for £575 on a credit card, although that was because I managed to avoid a £10 delivery surcharge as I live close enough to the distributor to pick it up.

Where? DABS Direct in Edinburgh (0131 556414) or London (0171 582 4777). I bought a VGA 15-23-pin adaptor from First Computer Centre (0113 231 9444) for £8.49 including VAT and postage. A kettle end lead with a plug is required if you don't have a Goliath power supply or similar, but these can be obtained from any computer shop that sells any peripherals. Oh, it is

a GPM 1701 Microvitec and not an Amiga M1764. It does come with a manual and doesn't require any extra software – it also memorises 32 different screen settings automatically after each new one you re-size to fit the screen, like DBL PAL Hi-Res no flicker or Multiscan Productivity.

Good luck and best wishes. I know you are doing your best. My only wish is to have millions of pounds to buy what VIScorp now have and do what we all want for our beloved machine. To advertise and promote is the only way forward and to get through to the brain dead PC owners that although their machines are faster, their flash front ends don't hide the fact that Amiga software will always do the job in an easier and more friendly way.

Simon Phelan
Aldershot

I'm sure that many readers will be green with envy at your new setup and maybe a few will follow suit. Thanks for the well wishes and we can only wait to see what the future holds for the Amiga.

Relaunch or else

I have been a subscriber from Issue 1 and have seen a great mag decline to little more than a backing sheet to a collection of Coverdisks which, if the truth be told, are of little use or interest to the majority of readers. While Amiga Format carried commercial programs, albeit out of date, we have been left with not very much and a series of adverts for AF advising us what super Coverdisks are available next month.

I can understand that AS has always been the low circulation, poor relation but the sooner you realise that the majority of readers liked the original format and the very low cost without Coverdisks, and the sooner you relaunch with the old style, the sooner you will regain many of your readers. The only alternative is to incorporate the mag with AF.

Your situation is not improved by the performance of TIB plc. I first returned the Subs disk from Issue 66 as it had a read error, but I was sent a copy of the main Coverdisk. I again returned the disk asking for the Subs disk and have now received the Subs disk for Issue 67, a magazine which hasn't reached me yet! Bah, who wanted the Subs disk from Issue 66 anyway?

I do hope the magazine survives but unless you take some

drastic action I regret that it will not. I for one cannot continue to pay the inflated price for so little.

A J Dunn
Aylesbury

Well, a lot of people do appreciate the Coverdisks. The difference between the AF Coverdisks and the AS ones is normally down to a question of circulation. A business is not going to agree to put their full program onto a smaller circulation mag – and of course it's never going to be the latest version, they do have to make money to cover their own development.

The truth is here and it's very simple. Had the old format been kept, Amiga Shopper would have closed well over a year ago because it did not attract sufficient readership. Sure, some people preferred it, but not enough. The new format has allowed us to keep publishing, but the Amiga market has continued its downward spiral and nothing can draw new readers, because they don't exist. AS will continue in its current format for as long as possible and I have no idea how long that will be.

As to TIB, I can only apologise. Having had similar correspondence with my bank, I know how there seem to be some times when a simple request never gets sorted correctly. I will track down a copy of the Subs disk and send it out to you personally.

Losing weight

It is not often that I feel compelled to write to complain about things but this is one occasion where I will. What the hell is happening to my favourite Amiga magazine? It is the only magazine that I have on regular order from my newsagent (I can't afford a subscription), but it appears that every month the magazine gets thinner. The same cannot be said of Amiga Format. As if that wasn't bad enough I collected my September issue of AS and oh my goodness – no (expletive deleted) AMOS column. Cut short in mid run – cardinal sin and all that. What is going on at Future Publishing? Well I have a theory and it is that it is only a matter of time before we see a title merge on the newsstand – Amiga Format incorporating Amiga Shopper. I sincerely hope I am wrong.

One thing that bears out what I am saying is this: David Taylor who as, I believe, the title of

Assistant Editor and who I presume edits Amiga Shopper doesn't even warrant a mention in the Who's Who column except as a contributor. No, I'm wrong, no mention at all, it's in Amiga Format that he is mentioned as a contributor. Nick Veitch gets plenty of glory though.

Roy Lacey
Fishponds

Blimey, you go on holiday for one week and all hell breaks loose. Yes, the AMOS column disappeared for a month, but as you can see it has been properly concluded over the last two months. As to a title merge, I know no more than you do except that AS is set to continue for as long as possible. As to myself disappearing from the Who's Who column, nobody seems to know why that happened. It appears to have been a mistake and I'm glad to say that I have been resurrected.

Publish and be damned

I am writing to protest very strongly about the absolutely appalling way in which the readers of Amiga Shopper are being treated by Future Publishing.

First, you reduce our once comprehensive magazine to a paltry 60 pages (removing one Coverdisk at the same time) and see fit to increase the cover price (effectively you have imposed a 34% price increase, page for page). You have also reduced the magazine to one which is to all intents and purposes a subscription-only magazine (as it is no longer SOR and the value-for-money level is at an all-time low, very few newsagents stock it any more).

Then, this month, you delay the release of the August issue by TWO WEEKS, without a single word of apology or explanation – this is nothing short of being down right rude. Why the unacceptable delay? Why no apology or mention of the reason? Surely that is not TOO much to ask, especially as some of us have been subscribing for five years...

I also notice that there are several glaring omissions from this month's issue. For example, where is the 'full round-up of the available (A1200 tower) systems' that was promised last month for this issue? I also notice that amongst the reviews planned for next month are the Genius 1212HR and

InfrARexx – both of which were promised last month for the August issue.

Let me guess – all three were delayed due to unforeseen circumstances? (Again, not a single word of apology or explanation was offered).

It is blatantly obvious from the current direction that Future Publishing fully intend to close down Amiga Shopper, but are determined to extort as much money from their long-suffering loyal subscribers in the mean time.

If you were serious about trying to keep that magazine open (and I notice that there are quite a number of other Amiga magazines which are doing very well at the moment, from other publishers, so the market is obviously still there) then perhaps you should at least try to give the impression that you are not trying to merely rip us off. For example, go back to your older format – more pages, no Coverdisk (let's face it, how many sales would you lose by ditching that, given that the vast majority of your readers must be subscribers or regular readers with orders at newsagents) and use the lower-quality CHEAPER paper that you used to use in the days when you gave us 150+ pages for a quid (not so very long ago, either) – obviously such prices could not be offered today, but £4.50 for 60 pages is nothing short of a rip-off (not to mention a complete breach of one of your company's claims – "Better value for money. More pages. better quality...").

Keith Blakemore-Noble
EMail

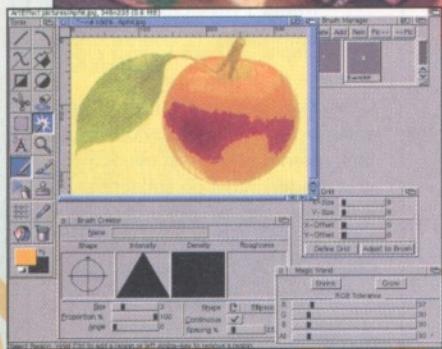
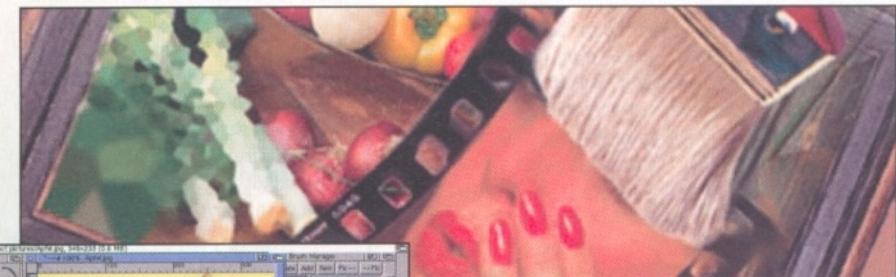
Well, it would be rather hard to explain in the magazine why it had gone late as all the relevant pages, like news, etc had gone to film already. I did offer an apology in the next Subscribers letter and explained that it was down to problems at our office. I'm afraid that your whole argument falls over as it is based on the premise that other Amiga magazines are thriving. Just because they say they are doesn't mean it's true. We have been completely honest with you about the state of the market and the magazine. This month we have seen another Amiga mag close and rumours (which I can't verify yet) of another having been closed. Other mags thriving? Oh yes.

We are doing our best – if you don't like it there's nothing I can do. Neither money, nor Amiga readers grow on trees. ■

The **essential** magazine for Amiga enthusiasts

AMIGA SHOPPER

Issue 69



AMIGA SHOPPER

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With Art Effect headlining next month's Amiga Shopper, we are preparing a special reviews issue, with coverage of all the new releases. Directory Opus 5.5 is the eagerly awaited update and we have two new CD drives that fit onto the A1200 IDE interface. We won't be stopping there either. Expect the best coverage and all the hot products in our biggest reviews section for an age.

Art Effect

Amiga Shopper brings you the first review of the release version of this astounding new program. We will be doing intensive testing and bringing you our findings. Art

Effect is being pit against not only all the Amiga art packages but also against the likes of Adobe Photoshop. Find out our honest opinion in this comprehensive review of the Amiga's most exciting release ever.

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As usual we'll also bring you the very best Amiga Answers, tutorials and the best from the Public Domain.



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Welcome to our new magazine

David Pettifer is the editor of *Amiga Review*. Let him tell what it holds...

Well hello Amiga Shopper® readers. Thank you for taking the time out to read this advert for our new magazine, *Amiga Review*. Released on 1st August, *Amiga Review* is a mail-order-only magazine created entirely using Amigas complete with coverdisks that covers all aspects of the Amiga market, but as you're readers of *Amiga Shopper*, we know you're most interested in the serious things your Amiga can do, and *Amiga Review* is full of productive, serious features, reviews and interviews.

Issue one contains features on buying and choosing a printer, PostScript printing, Desktop Publishing, ProPage DTP, Blitz Basic, how we make *Amiga Review*, upgrading your Amiga, details of the new Amiga computer, information on the VISCorp buyout, getting on the Internet, sampling, a review of Em Magazine, running your own software co. and more!

Issue two is on sale 10th September, and will be packed with more serious features, including the first of a series of ProPage and AMOS Professional tutorials, suitable for both beginners and experts alike, interviews with Mutation Software and Epic Marketing, columns from both of these companies and more key figures in the industry from F1 Licenceware to Vulcan Software, info on image-processing (we show you how to do it!), a new magazine coming out called The Domain, the Digita & Softwood war, CD-ROMs, scanning, the best of the glossy magazines and more opinionated columns for you to read. For details on ordering, see right! **David Pettifer**.

AMIGA REVIEW

Order issue one for £1.00

Issue one is still available, although we have exhausted supplies of its coverdisks. Therefore, we're letting it go at just £1.00! If you order issue one and two, you can have them both for £3.60 (bargain!). Other subscriptions are available as below too!

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SuperDisks

Every issue of *Amiga Review* always has at least two SuperDisks attached to the front. One is tailored for the games player, AmigaGamer - this month (Sept, issue two) packed with a demo of Valhalla 3 SuperSerious - full of serious software demos, sound samples, clip-art, and more. At the time of writing, we're just about to contact Softwood about a demo of Final Writer/Final Data. Call 01983 867377 for more info!

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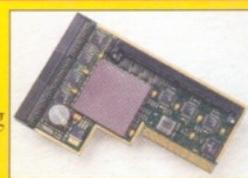
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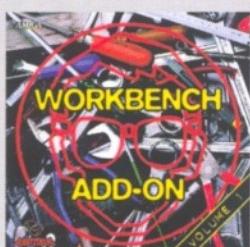
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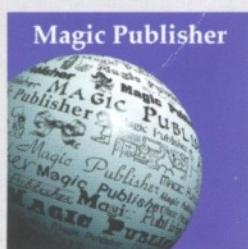
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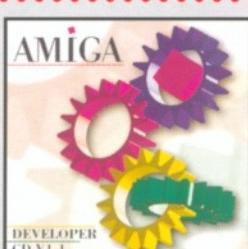
Workbench Add-On Volume 1

The Workbench Add-On CD-ROM is the ideal companion to your workbench. On this CD you will not only find the best programs, that are available for the Amiga, but you will also get them ready-to-run from the CD. In addition to this there is an installer script that installs the desired programs to your harddisk. The CD covers all areas of interest: all the programmer, the user, the creative and the gamer will find what they are looking for. On this CD-ROM there are many shareware programs, some of them at a special price, if you get registered. There is e.g. Shapeshifter for 40.-DM (instead of 50.-DM), in addition to this there is a 50 MB Mac partition, that you can start playing around with Mac applications right away. Then there is PowerPlayer for 20.-DM (instead of 30.-DM); there are, of course, loads of modules with it, so that you can try it right away. AmiWin, the new X11-server for the Amiga is available for \$40, instead of \$50. You can see so much more than 100.-DM with this CD. Therefore you only have to send in the appropriate page in the booklet to the author of the program. £24.95



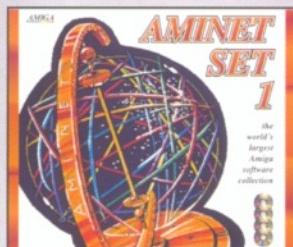
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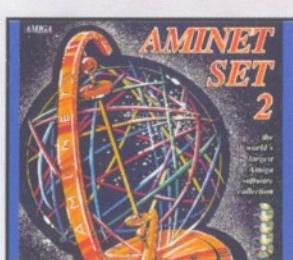
Amiga Developer CD v1.1

The official developer CD from Amiga Technologies contains all the material you need to start developing software for Amiga computers. This includes: The CD32 developer package. In addition to the original live disk set distribution you will find the "Build-CD" CD writer package. Packages contributed by 3rd parties: The WBPath and ActionSSM packages, courtesy of Ralph Babel; The Envoy v2.0 developer kit, courtesy of IAM, Inc.; The Net 225 developer kit, version 2, courtesy of Interworks, Inc.; The Kiskometer package, courtesy of Angela Schmidt; The Enforcer v37.64, courtesy of Mike Sinz; Information in support of forthcoming operating system developments. Additional developer material: BOOPSI gadget and image classes; The AmigaOS 2.04 example code, as part of the original 2.04 Native Developer Kit; The RKM 2.04 code examples; The complete set of registered IFF forms; IFF example and stress test files; All IFF packages released by Commodore Amiga, Inc., covering 1986 through 1992; The comd v37.1 MIDI developer kit; The SANAII standard package and developer kit; The Installer v4.1 package; International support material; Sample text using the full ISO-8859-1 character set; Translation guidelines; The updated 3.1 Native Developer Kit "C" and assembly language header files, linker and runtime libraries; System documentation and tutorial texts; Example code covering the Amiga OS 3.0 and 3.1 features; The NewIFF v3.9 package; The AmigaGuide and Datatypes documentation and example code. Reference material: The collection of AmigaGuide Volume 1 articles, covering Spring 1987 through January/Febuary 1989; The complete AmigaGuide Volume 2 articles in AmigaGUIDE format, covering January/Febuary 1990 through March/April 1993; also included are the printable issues in PostScript and PageStream format; Hardware related articles; The Includes & Autodocs in AmigaGuide format. £14.95



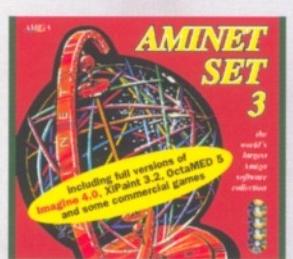
Aminet Set 1

Aminet is the world's largest collection of freely distributable Amiga software. Up to 10,000 users access the vast archives every day and countless programmers publish directly via Aminet. Until recently access to Aminet was restricted to international network users. With Aminet Set 1, consisting of 4 CDs, the complete archive is published for the first time. This CD-ROM-collection, which is dated January 1995, offers an almost inexhaustible reservoir of top-value Shareware. A wide variety of programs is included: Applications, Games, Demos, Pictures, Mods, Animations, Developer-Material, ... It contains approximately 4 gigabytes of software in 12,500 archives and you will enjoy the comfortable user-interface. £29.95



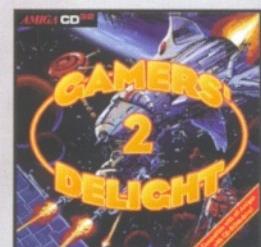
Aminet Set 2

AMINET SET 2, dated November 1995, consists of approximately 4 gigabytes of software in 12,000 archives. Whether you like applications, games, communications or programming, the SET gives you all you need. Easy to use index files and search facilities make accessing it a pleasure. £34.95



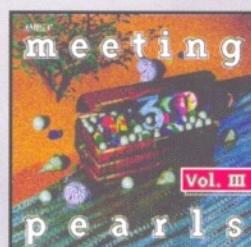
Aminet Set 3

AMINET SET 3, dated July 1996, consists of approximately 4 gigabytes of software in 9,000 archives. Also included are full versions of Imagine 4.0, XPaint 3.2, OctoMED 3.0 and some commercial games. Whether you like applications, games, communications or programming, the SET gives you all you need. 93 MB Utilities, 79 MB Documents, 408 MB Text software, 12 MB Disk/Hard tools, 7 MB Hardware related, 756 MB Pictures & Animations, 208 MB Graphics software, 394 MB Graphics & sound demos, 563 MB Games, 64 MB Miscellaneous, 685 MB Music modules, 28 MB Music software, 131 MB Communications, 91 MB Development Software, 88 MB Business software. Easy to use index files and search facilities make accessing it a pleasure. £39.95



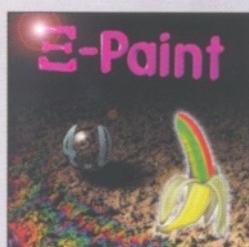
Gamers' Delight II

This CD contains 1070 games for the Commodore Amiga from different categories. Action, Jump & Run, Card Games, Puzzles, Strategy Games - a whole range of computer entertainment await Gamers' Delight will hold you captivated for hours and guarantees long-lasting pleasure. 70 games are commercial versions - no public domain or no demo! This CD can be run on any Amiga with CD-ROM drive, 1 MB free memory and Joystick/Joypad. £26.95



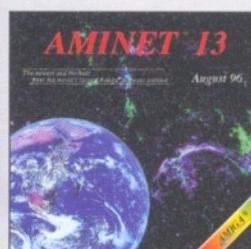
Meeting Pearls Vol. III

The Meeting Pearls Volume III contains 650 MB of the finest FD software via a special user interface, which has been created to allow you to find the program of your choice with ease. The contents: 10 MB Packer, Cruncher, Archive Programs - 3 MB CD-ROM Utilities - 21 MB Communication and Network Programs - 5 MB Debugging Tools - 29 MB Development Tools - 13 MB Floppy, Hard Disk and SCSI Programs - 8 MB Educational Programs - 9 MB Games - 35 MB Graphics Programs - 39 MB Internet Movie Database Updated Version - 7 MB Midi Tools and Programs - 27 MB Mods - 12 MB Music Programs - 21 MB Pictures - 13 MB AmiTCP and more for Networking - 60 MB Documentation, CD-ROM Databases, etc. - 96 MB PostX 1.4 - not previous available on any CD-ROM - 15 MB Utilities - 30 MB HTML-Pages - Collections of datatypes, benchmark programs, icons, programs for amateur radio and electronic/electronic engineering are also included. £49.95



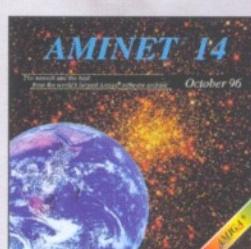
XiPaint V4

XiPaint 4 is the new version of the leading edge, 24-bit paint program. It's suited to the demands of novice and expert alike, and within a short time, you too will be able to produce colourful and creative art in 16.8 million colours. This version of XiPaint features animations as well as easy-to-use raytracing-capabilities. Overview of Features: Diverse paint functions including colour, contrast and saturation adjustment, Mask, outline, recolour and fill functions. Airbrush with adjustable spray functions. Lighttable function for manipulating montages and animations. Text functions with anti-aliasing using Comographic fonts. Support for a variety of graphic formats. Unlimited Undo. Diverse manipulation of alpha channel. Supports many graphic cards. Layers to combine different projects. ARexx port. Drag & Drop colours. External filter module. Extensive documentation: 60 textures, 50 landscapes, 30 other pictures and many fonts included. £49.95



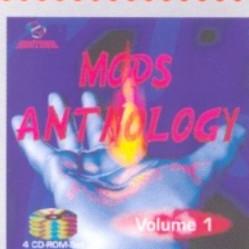
Aminet 13

Still available! £14.95



Aminet 14

AMINET 14, dated October 1996, consists of approximately 1,1 gigabytes of software in 2400 archives. Since the release of Aminet CD 13 more than 750 MB new software has appeared. User friendly access software makes the Aminet CD 14 a pleasure to use. £14.95



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NetNews Offline Vol. 1

NetNews Offline Vol. 1 is the first disk of a new bimonthly published series of Amiga CD-ROMs which contains all Amiga-related news-groups from the internet. Every volume features about 50,000 articles which contain hot rumours, important information about all aspects of the Amiga, press-releases, discussions and flame wars, ... A newsreader is included. NetNews Offline is the cheap alternative of getting in touch with Usenet. £14.95

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